

E. M. GRIFFITH AND THE EARLY STORY OF WISCONSIN FORESTRY (1903 - 1915)

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preface

This is a unique trek back into history. For it is reported by one who has been there. The author worked with, discussed with, and dreamt with E. M. Griffith. While the book unfolds Griffith's unique contributions, the story also intimately involves the author, and we want to introduce him at the outset.

Twelve men reported for a civil service exam in Rhinelander, Wisconsin, on Friday, March 10, 1911 for positions as forest ranger for the State Board of Forestry. One of the twelve was F. G. Wilson.

The candidates were expected to be expert woodsmen, know how to handle an axe, construct roads, trails, fire lines and estimate timber. The wages were \$60.00 per month.

On May 1, 1911, Fred Wilson, who placed first on the exam, was hired as a forest ranger and reported for work at the Trout Lake Forestry Headquarters in Vilas County. So started an outstanding forestry career spanning a period from 1911 until 1952 with the exception of the period 1916-1922.

Spending his early years in Sheboygan, Wisconsin, Fred received his formal forestry training at the then Michigan Agricultural College in East Lansing, Michigan. He graduated in 1911 and returned to his home state to begin his professional career as a disciple of E. M. Griffith.

During the Griffith era, Fred worked on programs of fire protection, establishment of the forest reserves, development of the first tree nursery at Trout Lake and the establishment of the Star Lake Plantation which is the oldest managed plantation in Wisconsin.

He moved to British Columbia after the forestry program ceased in Wisconsin in 1915 because of the State Supreme Court ruling against works of internal improvement. He became the first registered forest engineer in the province.

Returning to Wisconsin in 1922, he added another first to his list of forestry achievements. He became the first extension forester at the University of Wisconsin in Madison and served in this capacity until 1930. An early experiment of the need for land use zoning found Wilson crusading for zoning in 25 rural northern counties, resulting in the first rural zoning ordinance in the United States restricting land use to forestry in 1933. The zoning movement spread rapidly from the initial Oneida County ordinance until 5,000,000 acres of lands were closed to agricultural use by the end of the decade.

One of the most significant steps in the development of Wisconsin's forest policy was the 1929 Legislative Interim Committee report on Forestry and Public Lands. The report drafted by Wilson led to

legislation enabling counties to take title to delinquent land, to establish county forests, and to zone for forestry. The existing 2 1/4 million acres of county forest, comprising the largest ownership of public lands in the state, was acquired without a legislative fiscal appropriation and exemplifies the success of his legislative proposals in carrying out the Griffith programs of a decade earlier.

Fred Wilson served the Wisconsin Conservation Department in various capacities during the period of 1930-52. He was appointed first to Chief Ranger for Fire Control in 1930. Later he served as the Superintendent of the Cooperative Forestry Division from 1932 until his retirement, with responsibility for the forestry program on county and private forest land. He was instrumental in establishing a cooperative forestry research program between the department and the University of Wisconsin, which is today, recognized as one of the most productive forestry research efforts in the country.

Wilson accepted assignments on numerous forestry committees at both the state and national level. He was a fifty-year member in the Society of American Foresters and was awarded the Distinguished Service Award of the Wisconsin-Michigan Section in 1968 and recognized with the prestigious rank of Fellow in the Society in 1979.

The Natural Resources Board honored Wilson in 1973 by naming the forest nursery at Boscobel, Wisconsin, the F. G. Wilson Nursery, the first Department property named after a living person.

Wilson has published numerous forestry articles during his career, shared his forestry expertise with faculty and students at several forestry schools as a visiting professor, and served as a consulting forester in his retirement.

Wisconsin has been fortunate that F. G. Wilson spent his professional forestry career in the state. His skills, courage, and dedication to the advancement of Wisconsin forestry make him one of the state's distinguished foresters and citizens. Present and future generations will be in his debt for his role in carrying out the Griffith ideal for Wisconsin Forestry.

This book was Fred's labor of love for 2 decades. His meticulous records, exceptional memory, and unflagging spirit made it possible for him to put together this account of a significant period in Wisconsin's forestry history, starring the man who shaped its future.

Milton E. Reinke, Retired
Department of Natural Resources

prologue

“E. M. Griffith, the newly appointed state forestry expert, arrived in Madison Sunday night and is stopping at the Park Hotel. He entered upon the duties of his office this morning. He is at present outlining the work of his department. His office will be located in the state land office in the capitol for the present, but later a separate room will be provided in the building for his department.”

Thus the Wisconsin State Journal of Monday afternoon, February 1, 1904, in a brief factual statement presents all the components of a drama: the scene is Wisconsin, the leading character enters, the field of his endeavors is the new but vaguely understood profession of forestry, while the apparently insignificant reference to the state land office is a foreboding of his exit.

Too often advances in public affairs are recorded as popular movements, without due appreciation of the contribution made by leaders devoted to a cause. This biography of Wisconsin's first state forester seeks to render a factual account, even though by its very nature it becomes a tribute. Yet it is also a personal account by one who had the privilege to serve under him. Thus some personal references may be forgiven, if only because they serve to qualify the witness.

It is appropriate to leave a record of his vision and his works, that the people of Wisconsin may realize their indebtedness to him. On the foresters now following him there rests the obligation to attain his objectives, to the end that our forests will earn a return on the investment, assure increasing employment in the woods and raw material for the mills, provide the products for our daily needs, and ever serve to rest the eyes and shield the land.



E.M. Griffith, Chief State Forester 1905-1915

acknowledgments

In this belated record of the life of Wisconsin's first state forester, efforts were made to supplement the author's memory and to reconcile minor conflicts in published material. When first undertaking this task, not even a card on him could be found in the library of the State Historical Society. Class histories at Yale, press clippings, interviews and correspondence with surviving foresters of his day provided the material on his life before he came to Wisconsin. For his active years, the four Biennial Reports of the State Forester were most helpful, though reports of two committees

of the legislature, the court ruling in the forestry case, county board minutes, and press items provided valuable supplements to the record of that period. Old residents of Roxbury, Connecticut gave some information as to his later years, and provided contact with his daughter-in-law, who permitted selection from his very limited personal papers.

This being a personal account, there are no footnotes to distract attention from the story, though some references to sources are given as part of the text. The writer is indebted to some of those who also served under our first state forester.

contents

The Early Years	8
Problems and Progress	13
The Years of Achievement	36
The Growing Opposition	50
Forestry After the Griffith Era	62

the early years

Edward Merriam Griffith, son of Walter Scott Griffith and Henrietta (Spring) Griffith was born in Brooklyn, New York on February 8, 1872. Not a product of our public schools, he attended Kings School at Stamford, Connecticut, prepared for college at Phillips-Andover, and entered Yale with the class of 1895 as an engineering student in Sheffield Scientific School. But becoming interested in forestry, he left in his senior year to study in Germany, since there was no school of forestry then in America.

With his engineering training, the mathematics of forest measurement and management were readily mastered. Because of the limited number of tree species, which had survived European continental glaciation, the basics of silviculture were almost elementary. Traditionally much time was spent in working under supervision on forest estates. His training included demonstration tours through forests conducted for students from England and India by Sir William Schlich, the noted German forester, who like Sir Dietrich Brandis, had been knighted for his service to the British Empire in India.

Returning after two years of study in 1897, Griffith worked without pay on the Biltmore estate in North Carolina, where the wealth of tree species supplemented his knowledge of silviculture. Serving under Dr. Carl Alvin Schenck, he soon was employed as Schenck's assistant. Schenck contributed to Griffith's qualifications as a forester, and in turn was helped in mastering the English language.

In October of 1898 Gifford Pinchot, who had succeeded Fernow as Chief of the Division of Forestry in the Department of Agriculture, hired Griffith and Henry Solon Graves. The national forest reserves were at that time still in the Department of the Interior and the Forestry Division was largely engaged in promoting the concept that woodlands could profitably be managed to produce continuing crops of timber. Since Pinchot had initiated the forestry work at Biltmore, it was natural to encourage other owners of large estates to follow that example, though some wood-using industries were also provided with working plans.

One of Griffith's stories of this period referred to a trip to an estate which he was to examine. The owner told a groom, "Saddle Lucifer for Mr. Griffith." Though a good horseman, such a name raised a question as to whether the horse was vicious. The owner explained that he kept only spirited horses and some of his guests had been thrown, so he decided to give his horses rather ominous names. Lucifer was by Satan out of Hell-to-Pay!

Meanwhile, an agreement between the Departments of Agriculture and Interior had provided that the Forestry Division was to prepare a working plan for the Black Hills National Forest Reserve. So early in 1900, Pinchot sent Griffith to make arrangements for the field work to be done the following season. This assignment kept Griffith in the Black Hills until late in the season, so that he had not returned to Washington when Pinchot called his staff together on November 30, 1900 to consider the matter of organizing a Society of American Foresters. Thus his name has never appeared along with the seven listed as charter members, which always head the roll of membership as such directories are periodically published.

On May 1, 1901, Griffith led his party of student assistants from the town of Spearfish, South Dakota to begin the field work on the Black Hills project. Quoting from one of that group, Coert duBois (1957):

"It was a grand crowd of tough joes and Griffith worked the hell out of us and we loved it. As soon as we got our camp organized, Griffith divided us into valuation survey crews, one compass-chainman and two caliper men to a crew. Griffith would escort each crew out to its starting point in the morning and instruct the crew boss to run so many strip acres north, then so many east, then so many south. In rough going and thick timber, valuation surveying was no boy's job. It wasn't long before Griffith stepped up our stint to 20 acres a day, 2 1/2 miles of survey line, with maybe a two-mile hike before and after, a standard which we kept up for the whole summer's job. At night, Griffith would go over the acre sheets and plot the numbers on township plats."

duBois reported that wagons drawn by four-horse teams hauled supplies as camp was moved to new locations. Also, when in the vicinity of logging operations the party took stem analysis data, which were later worked up for volume and growth rates along with other field data in Washington. Those retained for office work, no longer fed as in camp, were promoted from student assistant at \$25 per month to laborer at \$40.

Griffith completed this first working plan for a national forest property and called attention to the ravages of a bark beetle then unknown to science, which he reported had killed 225 million board feet of ponderosa pine in the Black Hills. In addition to

gathering data on timber volume and growth rate, he was concerned with local needs for lumber and mine timbers, with the objective of expediting timber sales. He also pointed to the need for cutting overaged trees to control the bark beetle. The Deadwood and Rapid City Press cited Griffith as a pleasant gentleman who seems much interested in forestry work and believes that in the near future much of the unpleasantness which surrounds the working of the forest reserve will be eliminated. After 1905, the forest reserves were transferred from the Interior Department to the newly created U.S. Forest Service of the Department of Agriculture and designated national forests.



Griffith (holding pet fawn) and Black Hills crew, 1901

Studying Black Hills Timber.
Mr. E. M. Griffith, of the Division of Forestry and Department of Agriculture was a recent arrival from and is now engaged in making a very careful and thorough investigation of the quantity, character and commercial value of the timber upon the reserved lands within the Black Hills Forest Reserve. This investigation is elaborate in all its details and will be conducted along the lines of research adopted by the government as the result of many years of close study and observation upon scientific principles. Mr. Griffith, assisted by study and observation upon scientific principles. Mr. Griffith, assisted by a corps of experienced, competent men, will doubtless be thus engaged during the entire year. He is now in the forests and expects his assistants to arrive soon.

Mr. Griffith has been engaged the past two years by the Division of Forestry, chiefly in the forests of the northeastern and southern states, making working plans by means of which the large number of companies are operating. By these working plans the timber is cut, above a fixed diameter upon the stump, with a fixed object of securing a definite annual yield and at the same time securing a second crop of timber. By these methods the timber cutting is done systematically only the merchantable timber is disposed of and the forests are greatly improved in character.

As the forest reservation in the United States embrace in the aggregate about 46,000,000 acres, and the secretary of the interior has called upon the division of forestry to make working plans for these immense tracts, it is an undertaking that will consume a number of years. The secretary has decided, in view of our peculiar situation and the importance of a supply of timber in the development of our resources,

Deadwood, S.D., Apr. 1900

Of Pinchot's early group, Graves left federal service to become Dean of the Yale Forestry School, which opened in the autumn of 1900. Overton Price became associate forester and the indispensable chief-of-staff who met all situations in the Washington office. As for Griffith, his professional competence and ability to establish working relationships qualified him for special assignments requiring independent action. Thus, when Territorial Governor Dole requested Secretary of Agriculture Wilson for a study of forest conditions in the Hawaiian Islands, that task was naturally referred to Griffith.

Random items from the Honolulu press report that he arrived on December 26, 1901, called on Governor Dole the same day, and wasting no time on preliminaries began active work the following morning. On December 29, a newspaper column head read:

Forester Is Very Busy Man, E. M. Griffith Hard at Work. After six weeks in the forests he was entertained by Yale alumni, gave a lecture on forestry at the YMCA Hall, and left February 16, 1902 for Japan to spend a month there before proceeding to the Philippines. Personally he has made an excellent impression on the community and will be greeted by a host of friends when he returns to the Islands.

His report was drafted in Japan, and the transmittal directly to Governor Dole instead of through channels via Washington is noteworthy!

This earliest report by Griffith is still a reliable reference work according to L. H. Bryan, retired State Forester of Hawaii, in a statement made at the Sixth World Forestry Congress in Madrid on June 4, 1966.*

Leaving Japan for the Philippines, Griffith carried the address of Captain George P. Ahern, 9th U.S. Infantry, Forestry Bureau, Manila, whose major responsibility was to supervise timber sales authorized by the earlier Spanish forestry office. There is little on Griffith's activity here except for a press clipping of the text of the Philippine Act published by the acting civil governor on August 14, 1902. This indicated that Griffith had served there during the intervening months. However, he departed on annual leave before Pinchot, traveling in the opposite direction, reached Manila on October 26 of that year. Pinchot's account of his journey does not mention Griffith's prior months in those islands.

Yale Class Notes report his travels of 1902-03 in India, Ceylon, Austria and Germany, studying forest conditions.

That this was more than taking the grand tour is shown by his notes on tree species, diameters, green and dry weights of wood and prices of forest products in India and the addresses of both British and Indian

forest officers. Presumably he was contacting foresters he had met on the forestry study tours in Germany conducted by Sir William Schlich. Payments for supplies, cooks and bearers are recorded. He was once requested to hire laborers from a village in northern India. According to the story he recounted later, the custom of polyandry prevailed in this district. Traditionally a woman would assign one or more of her husbands to work for two weeks, at which time she sent others of her husbands to relieve them. Griffith cited this fair division of labor as proof that the women did not have favorites!

Continuing on his journey, he spent some time in the forests of Austria. Lacking information on his stay in Vienna, one can try to visualize the days of a man of thirty years with ample funds in this city of culture at the height of its former glory. Officers in the colorful uniforms of famous regiments promenading on St. Stephens Square, the great Cathedral, the Theater, the Opera House, the University, the Vienna Woods, vintage wines and Strauss waltzes and the address of a Fräulein in his notebook. Then on to Germany; his copy of Baedeker's Southern Germany is dated, München (Munich), May 1903. Renewing acquaintances, he spent more time in the forests. It was at this time that he shot the Auerhahn or capercaillie, the largest species of grouse. As he later told the story around the fireplace at Trout Lake, he was at the hunting lodge on the forest of an Austrian count. One evening at dinner it was announced that the visiting American forester was to have the privilege of shooting an Auerhahn, in that region a greater trophy than a record stag, for these great birds were not common. Only the black males could be taken and only towards the end of the mating season. He was handed a single shot rifle with an ivory bead front sight and in the company of a young forester, who had located a bird, started up a mountain trail in the light of a full moon. On the way his companion explained the procedure.

The mating call ends with a hiss, during which the bird's eyes are closed permitting three forward steps, but any lateral movement must be avoided. Coming to an open glade in the spruce forest, they paused until they heard the call, then proceeded cautiously. When the forester stepped aside and tapped him on the shoulder, he advanced alone in the prescribed manner until he distinctly saw the bird. This was a trying moment, for the prestige of all American foresters (his host did not know how few there were) hung on a single shot. After he fired, his companion lighted a lantern and they found the bird under the tree. Returning triumphantly to the lodge, there was the ceremony of plucking the proper tail feather and sticking it in his

*A printed copy of this report has been submitted to the Archives of the Wisconsin State Historical Society Library.

EXPERT ON FORESTRY

E. M. Griffith Here to Study Hawaii.

WILL MAKE TOUR OF ISLANDS

With Wray Taylor Will Visit Nuu-anu Today, Tantalus Tomorrow and Maui Tuesday.

E. M. Griffith, the long expected expert from the Bureau of Forestry at Washington, arrived yesterday on the Peru.

He wasted no time in preliminaries, and will begin active work this morning, when, together with Wray Taylor, commissioner of agriculture, he will make a visit up the Nuuanu Valley. Tomorrow he will visit Tantalus, and Tuesday he will probably leave for Maui, to begin his tour of investigation over the entire island group.

Mr. Griffith is on his way to Manila, where he will join Captain Ahern, chief of the forestry division of the Philippines. He stopped off in Honolulu at the special solicitation of Governor Dole and Secretary Cooper, who, upon his recent visit to Washington, secured a definite promise from Secretary Wilson that one of the forestry men would be allowed to stop here long enough to see the forest-

FORESTER IS VERY BUSY

E. M. GRIFFITH HARD AT WORK

MUDDY ROADS PREVENT ASCENSION OF TANTALUS WITH WRAY TAYLOR.

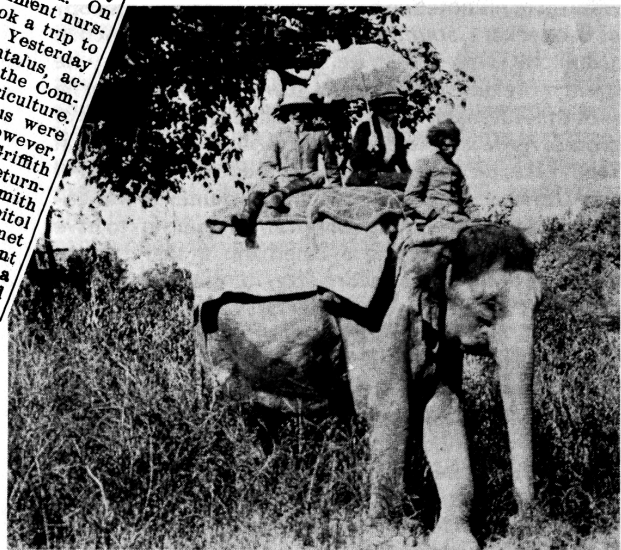
Instruments Ready for Work on Maui and Hawaii—Meeting With Professor Koebele—May Visit Molokai and Kauai—Making Acquaintances in Honolulu—On to Manila.

Mr. E. M. Griffith, the visiting forester from the Department of Forestry in Washington, is having a very busy day during his stay in Honolulu. On Monday he visited the government nursery in the forenoon and took a trip to Tantalus in the afternoon. Yesterday he started up Tantalus, accompanied by Wray Taylor, the Commissioner of Forestry and Agriculture, leading up Tantalus, and found the ascent too muddy, however, and consequently returned. When Dr. Jared Smith, chief of the office in the Capitol, Mr. Griffith also met the government forester whom he had a long talk with about insects and

FORESTER GRIFFITH LEAVES. Will Spend Month in Japan En Route to Manila.

Expert Forester E. M. Griffith leaves today on the China, not, however, going directly to the Philippines, but staying at Japan, where he will spend a month studying Japanese arboriculture and the general condition of their forests and climatic results. Mr. Griffith spent yesterday in the Bishop Museum, staying there the whole day, this being practically the only holiday he has enjoyed since his arrival. The early part of the week Mr. Griffith was for a day or two seriously indisposed, he thinks from drinking water at Wailua that failed to agree with him, and was forced to postpone his trip over Moanalua with E. S. Damon. His description of Henry Von Holt's place down the railroad is almost rapturous. He says that it is the most perfect and beautiful estate of its kind that he has ever seen. Mr. Griffith will keep in touch with the

Griffith (in pith helmet) as the pukka sahib in India, 1902.



hatband. After being instructed to wear his hat during the evening, the party celebrated his success by playing cards and drinking Rhine wine until daylight. Then after a substantial breakfast, the young count and some of his guests went trout fishing, while Griffith and the Forstmeister went on their inspection of some experimental plots.

Terminating the period of leave, he returned to serve with the U.S. Forest Service for the remainder of 1903, with assignments in Oregon, Idaho and Montana. This was the period when Pinchot and President Theodore Roosevelt were engaged in establishing new forest preserves. But the vastness of the forestry problem rated participation by all possible agencies

and federal support of forestry programs in several of the states was developing. An example of such cooperation was the earlier report *Forest Conditions and Interests of Wisconsin* by Filibert Roth.

Wisconsin enacted its first comprehensive forestry law in 1903, providing for a Forestry Commission composed of the secretary of state, state treasurer and attorney general (these three constituting the State Land Commission) and two members, John M. Olin of Madison and T. S. Cunningham of Chippewa Falls, appointed by the governor. Among its other powers, the Forestry Commission was to appoint a state forester, whose professional qualification required certification by the U.S. Secretary of Agriculture.

Seeking opportunity for achievement in a profession to which he was devoted, E. M. Griffith came to Wisconsin. The salary was to be \$2,500 annually.

And so this outstanding forester came to Wisconsin.

problems and progress (1904-1910)

Griffith reported for duty on the morning of February 1, 1904. The oath of office executed two days later is still in the files of the secretary of state. He was formally appointed by the commission on February 8, his 32nd birthday, after which he was introduced to Governor Robert M. LaFollette. The latter event marked the beginning of a decade of their cooperation for the advancement of forestry.

The duties of the state forester were to appoint fire wardens for control of forest fires and to examine some 40,000 acres of trust fund lands (lands still held in public ownership from the time of statehood) in Forest, Vilas and Oneida counties. The forestry law of 1903 had required that such lands were to be withheld from sale until they had been examined, and those found to be more valuable for forestry than for other purposes were to be held as a forest reserve. As with the federal program of those days, the concept was to reserve public lands for forestry, disregarding the fact that these state lands were not public domain but were granted to the state for the support of education. Yet the term forest reserve remained in use during the years of Griffith's service to the state.

After acquainting himself with state administrative procedures, Griffith spent practically all of his time in the north appointing fire wardens and acquiring a thorough knowledge of forest conditions in Wisconsin. Within four months, the State Land Commission at his request added 22,000 acres in Iron County to the forest reserve. For the remainder of that fiscal year, in addition to his salary and field expenses, there were only four items, the largest of which was to the Democrat Publishing Company for printing fire warning notices and forms for land examination reports. For the following year, there were nine items totaling \$3,383.02, the most interesting being: M. A. Castle, clerk services \$40.00. Thereafter, Miss Mildred Castle remained his secretary, in charge of all of the land transaction records.

In his message to the 1905 Legislature, Governor LaFollette stated: "The state forestry legislation adopted two years ago, defective in many respects, will, it is hoped, be so amended as to establish this important work upon a permanent and efficient basis." This led to enactment of Chapter 264, Laws of 1905,

which created the State Board of Forestry, composed predominantly of ex officio members: the President of the University, the Dean of the College of Agriculture, the Director of the State Geological Survey, the attorney general and one citizen appointed by the governor. Establishment of state forest reserves and the State Board of Forestry to administer them were the results of Griffith's first major efforts on behalf of Wisconsin forestry. For the period of its existence, this board chose President Charles R. Van Hise as its chairman, while E. A. Birge also served during the entire time. After two years, H. L. Russell succeeded Dean W. A. Henry; George Beyer of Oconto was the citizen member until near the end and there were four successive attorneys general. For a decade, there was a close personal collaboration between Van Hise and Griffith; the wisdom of the great administrator and geologist of world renown supplemented the zeal and professional competence of the forester. Events, rather than records of that period, testify to their joint efforts.

THE FOREST RESERVES, by the Act of 1905, were expanded to include all federal grant lands north of Township 33, which line coincides with the northern boundaries of Oconto and Taylor counties. The State Board of Forestry was to examine and release for sale those lands found to be more valuable for purposes other than forestry; the attorney general represented the Commissioners of Public Lands on the Forestry Board. Further, all income from the sale of timber from the reserved lands, sums received from timber trespass and income from the sale of any lands north of Township 33 were to constitute the forest reserve fund, to be used for purchase of lands and the improvement and protection of the reserve "except when otherwise disposed of by constitutional provision." This exception apparently applied to the lands granted for common schools, for in 1912, Griffith reported that \$17,138 derived from trust lands and from lands south of Township 34 had been paid into the school fund; while \$71,564 derived from land sales were applied to purchase additional forest reserve lands and consolidate them with existing reserves. All of this was done with the approval of the attorney general, who was a member both of the State Board of Forestry and the State Land Commission. That the latter body did not feel aggrieved may be concluded from a statement in their 1908 report: "The receipt for the forest reserve fund of \$12,449.39 for trespass, hay, etc., during the past two years indicates that the state lands are receiving better protection than ever before." They also reported receipt of \$116,487.26 from the sale of lands which had been



examined, appraised and released for sale. A trespass agent of those days, Joseph Lucius of Solon Springs, later stated that his remuneration consisted of one-fourth of the sum collected, no salary or field expenses being received.

The law of 1905 increased the annual appropriation for forestry to \$9,800, at which level it remained for six years. Miss Castle became chief clerk; and in May of 1906, Frank B. Moody, a graduate forester with previous work in the Maine woods, was appointed assistant state forester. After deducting the three statutory salaries, there remained from the appropriation a sum of \$5,000 for the salaries of three timber cruisers, supplies and travel expenses. Present-day foresters may well marvel at what was achieved with such limited funds!

Examination of 234,072 acres north of Township 33 was accelerated, so that by November of 1906, Griffith was able to report that 24,730 acres in Burnett, Douglas and Marinette counties, being found either more valuable for agriculture or too scattered for administration, were released for sale by the State Land Commission. Moody had been stationed in the north to take charge of land examination. I first met him at Lac du Flambeau, where he and one of the cruisers were reporting on the swamp lands which had been granted both to the state and as part of the Indian reservation. It was this contact with Moody and the days in the logging camps and around the sawmill, while working nights coaling up and keeping up steam



Logging the hemlock-hardwood during the Griffith era. Not all of the harvest was big timber (top), but more typical were the average-sized logs shown above.

on the logging locomotive, that led to my decision to study forestry.

Though no longer required to spend so much time in the woods, Griffith gave personal attention to special cases. One incident involved timber trespass by a lumber company. The volumes and values reported to him for an illegal cutting on state lands appeared too low. Though the company manager placed all facilities, including a private car on the logging railroad, at his disposal, he more than doubled the penalty and collected all of it. Supplementing such income and funds from the sale of lands was a 1907 appropriation of \$10,000 annually for the purchase of tax deed lands held by counties, the state to have prior rights of purchase. In 1909, the limitation as to tax deed lands was removed, so that the fund could be used to buy from any owner. Actually the period of extensive county tax deed acreage had passed, for now lumber companies were selling large tracts of cut-over lands to land companies at \$24 per acre, while a few reorganized as land companies after they had completed their cut and closed down their mills. An analysis of the situation appears in Griffith's 1909-10 report:

Up to as late as 1900, thousands of acres were forfeited to the counties for non-payment of taxes, for the lumbermen in those days felt that when the timber was removed the land was of little if any value. The counties were anxious to get such lands back upon the tax rolls and therefore, they auctioned them off and large tracts were sold for 20 to 25 cents per acre. If, however, the counties had retained all true forest lands and protected the large amounts of now valuable timber that was then left, they would now be receiving a very considerable revenue from such lands and could look forward to large future profits. At present, very little land is now being forfeited for non-payment of taxes and therefore, the counties have largely lost the opportunity they had a few years ago.

The price of agricultural land will advance as its value becomes better known, but the speculative holders of non-agricultural lands will gradually let go of such holdings and the counties will then be able to acquire them at their true value. . . . those counties will secure the greatest permanent prosperity that develop every acre to its truest and highest usefulness, and therefore, it is recommended that counties be authorized by law to acquire forest reserves and that the State Board of Forestry, upon request, may

cooperate with any county in the acquisition, protection and management of such reserves.

In support of this thesis, Griffith devoted two pages citing income from forests owned by local units of government in Norway. Having great faith in the value of presenting facts, it is still doubtful whether he hoped for early acceptance of his advocacy of forestry by counties and wood-using industries. Perhaps he wanted to be on record, but at least it shows that he saw the Wisconsin forestry problem as extending far beyond the limits of the state forest reserve. As a matter of fact, he thought of that state property not only in terms of its potential values, but also as a place where he could demonstrate that forestry was a sound and practical undertaking.

As land acquisition got underway, purchase was centered in the lakes region at the headwaters of the Wisconsin and Flambeau rivers. Griffith had ranged over this region soon after his arrival. On his first day

WISCONSIN GETS 20,000 ACRES

OF NORTHERN LANDS FROM NATIONAL GOVERNMENT AS FOREST RESERVE.

PATENT ARRIVES FROM WASHINGTON YESTERDAY— STATE IS COMMENDED.

Governor Davidson yesterday received a patent of nearly 20,000 acres of land from the national government to be added to the state forest reserve, which already numbers 300,000 acres and is valued at from \$2,500,000 to \$3,000,000.

This is pursuant to an act of congress passed June 27, 1906, at the instigation of Senator La Follette, by which states having forestry commissions and reserves, could select stipulated amounts of land held by the federal government in such states. State Forester Griffith, with the assistance of the members of the state forestry commission, made the selection. The patent arrived in the

Madison Democrat, Dec. 11, 1908

with Peter Jacobs, a state timber cruiser, their compass line brought them to a stream with waist-high depth of water and the cruiser wondered what this first state forester was going to do. But his doubt was soon allayed when he saw Griffith sit down and begin to unlace his boots. So they both stripped to the waist, tucked shirt tails under their arms and waded across. In those days it was necessary to walk long distances and dry feet in good cruiser's boots were important. About the only alternative to walking was to get a ride on a logging train. The engineers would drop off cruisers at a convenient place or stop to let them get aboard. Of course, all woodsmen had enough sense not to flag a train of logs at the foot of an adverse grade!

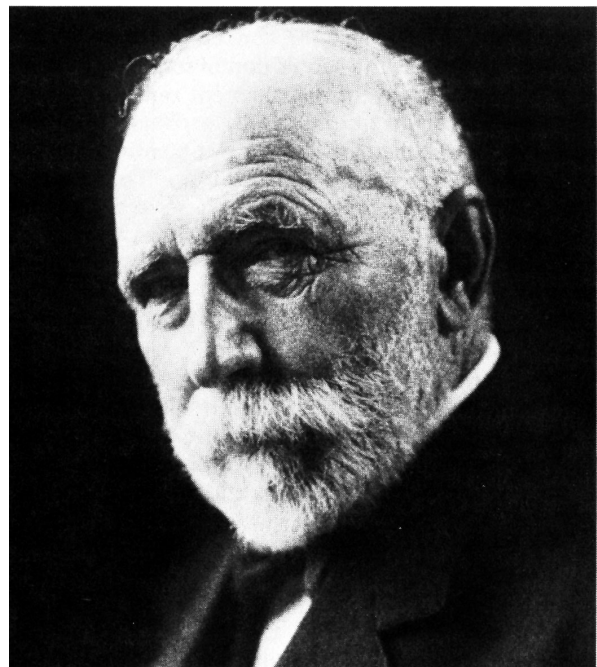
Griffith had early acquired an appreciation of the state's northern lakes region, though he was heard to wish, if only it had one mountain. His first report states: "Within this area is one of the most wonderful lakes regions in the world," and he was fully aware of its potential for recreation. So land purchase here proceeded as rapidly as funds permitted, and by the end of 1908, he was able to report the purchase of 16,726 acres in Vilas, 14,338 in Oneida and 2,815 acres in Iron County; a total of 33,884 acres at an average cost of \$2.93 per acre.

But there were other ways of getting land. The scheduled closing of the government land office at Wausau suggested an opportunity. Robert M. LaFollette, having left the governorship for the U.S. Senate, but continuing his ardent though never appreciated support of forestry, introduced a bill which as Public Law No. 304 of June 27, 1906 conveyed to the state 20,000 acres of unallotted federal lands north of Township 33. This grant carried a clause that the lands would revert to the federal government if not used for forestry. However, lands could be conveyed with the approval of the Secretary of the Interior, provided that income from sales of land or timber must be used for forestry, a requirement reflected in the Reforestation Fund (Sec. 25.30, Wis. Stats.) until its repeal in 1978 as a separate fund.

There followed a most startling case of promptness on the part of the General Land Office. Within less than a month after passage of the act, and at the request of Governor Davidson for a listing of vacant government lands, there was received a set of township plats showing 31,455.60 acres in 18 counties. All of these were checked for standing timber, but in almost every case it was found that most of the timber of substantial value had been stolen. Those lands within or near the forest reserve and the best of the scattered lands were chosen in 15 counties to a total of 19,998.39 acres, which was about all one could get out

of a 20,000-acre grant. Congressional financial support was obtained to aid the state in establishing forests at the headwaters of streams tributary to the Mississippi for their value in stabilizing stream flow.

That argument could not apply to the Brule River which flows into Lake Superior. Having secured a pledge for a gift of lands, Griffith won enactment of Sec. .1 of Chapter 460, Laws of 1905 declaring a state policy to acquire a forest reserve on the Brule and also prohibiting the building or maintenance of dams on that stream. According to Joseph Lucius, the construction of a dam had been authorized without prior acquisition of flowage rights and Frederick Weyerhaeuser wanted assurance that the Brule would be kept in its natural state and open to the public. Thereafter, a warranty deed for a consideration of one dollar was received from the Nebagamon Lumber Company, conveying 4,320 acres to the state. Again, there was the provision that the lands would revert to the donor if ever they were not used for forestry. This deed was executed by Frederick Weyerhaeuser. On a later release of several descriptions to permit an exchange with Douglas County to improve blocking of both the state and county forests, the signature of F. E. Weyerhaeuser appears as the secretary-treasurer of the Nebagamon Lumber Company. This Frederick Edward Weyerhaeuser, Yale 1896, and Griffith had spent part of one summer yachting at Block Island on Long Island Sound.



Frederick Weyerhaeuser

Their college friendship continued during Griffith's service in Wisconsin and presumably influenced initiation of the gift of land to the state.

By 1907, the old dams had been removed and in his report of that year, Griffith wrote: "The Brule is one of the most beautiful rivers in the country and with the expenditure of a very reasonable amount of money, the state can acquire a forest reserve which for beauty, good trout fishing and as an outing place for the people, especially in the northwestern part of the state, will be unexcelled." As with the lakes region of northeastern Wisconsin, there is indication of an appreciation of recreational values. His European experience had taught him that forests contribute other values without interfering with their primary purpose of producing recurring cuts of forest products so basic to the general economy and assuring continued employment in the woods and mills. Though the terms had not then been coined, he did have here the concepts of multiple use and wild rivers. Yet the acquisition of state forests sufficiently well blocked for management remained a primary objective and he repeatedly explained that this must precede such activities as forest planting.

Cut-over lands were purchased from Bradley-Kelly, Brown Bros. and other lumber companies and also from individuals. Two early deeds from John Barnes of Rhinelander conveyed:

September 13, 1907-593 acres @ \$2.00-\$1,186.00
September 14, 1909-29.90 acres @ \$2.00-\$138.80

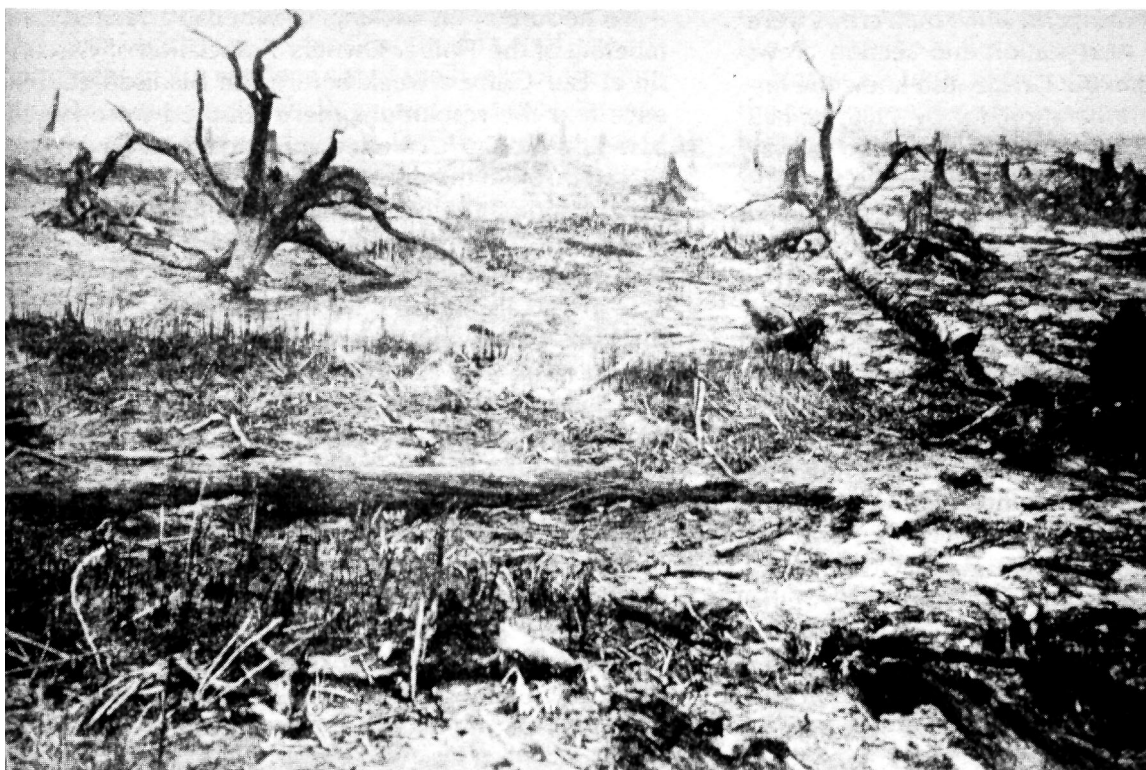
There is nothing unusual about these cases; they are cited here only because the vendor will reappear in a more prominent role. Purchase of the holdings of the Yawkey-Bissell Lumber Company is of special interest. At the board meeting of January 20, 1908, in the office of University of Wisconsin President Van Hise, as was customary, "It was voted unanimously that the lands offered for sale by the Yawkey-Bissell Company in Vilas County be purchased for \$2.50 per acre, as fast as they were released to the state." The attorney general and state forester were instructed to make as favorable terms as they were able as to the time of paying for the lands. Upon the suggestion of the state forester, it was agreed that a contract should be drawn by the attorney general between the State Board of Forestry and the Yawkey-Bissell Company covering the details of the time and manner of the release of the lands and the payment for them. Here is the first case of land contracts, though they were not specifically authorized by statute until 1911. Yet all members were present and the unanimous vote meant that it was supported by Attorney General Frank L.

Gilbert. That such a contract was made is shown by the board minutes of June 28, 1910, in which the request of the Yawkey-Bissell Company to release certain lands for a more advantageous sale to others was denied.

The January 20, 1908 meeting had also endorsed the purchase of standing timber from that company to preserve the beauty of the shores of Trout Lake. This led to the preservation of every pine tree between the logging railroad and the shore and extending westward along the point to the narrows, an action also urged in letters from Senators Bird and Krumrey and Assemblymen Kubasta and Thomas, of the Special Legislative Committee on Waterpowers, Forestry and Drainage. In all of this activity, the state forester wanted a forest, just as a doctor in a new community wants a hospital, that his profession might better serve the public, for the new profession was much misunderstood. The progress made in acquiring lands and blocking state holdings may appear all that could be accomplished with the limited appropriations, but other duties took much of the time and funds available to Griffith during these years.

FOREST FIRES were an immediate concern, for the act of 1903 had designated the state forester as the state fire warden. Fires had never been much of a threat where settlers had homesteaded in the region of hardwood forests and gradually expanded their clearings. The hazard came with settlement on cut-over lands following large-scale pine logging operations, leading to such conflagrations as the Peshtigo fire of 1871, the nation's worst for loss of human lives, or the Phillips fire of 1894. In areas piled high with logging slash, fire was a cheap and effective tool to subdue the land. When the fire spread beyond the settler's own land, that too was good because it provided extensive inferior pasture. Fences came later; meanwhile, cowbells helped to find straying cattle. Fires were bad only when they burned buildings or hay-stacks. As for the lumbermen, they were done with the land after logging, and fires were bad only when they threatened logging camps, equipment or decks of logs. There were low-priced lands carrying magnificent stands of pine in Idaho and in the south. Land was for farming and the people in the north never doubted that the agricultural land use pattern of southern Wisconsin would be extended, so that in a generation theirs too would be a region of prosperous farms. So why waste the taxpayers' money fighting little brush fires?

This was the situation confronting Griffith who had seen 26 percent of the land area of Germany in well managed forests, despite population pressure and the



After logging, the land was burned to rid it of slash, prior to the attempt at farming.

need to produce more food crops. He brought to Wisconsin the strange concept that there was such a thing as true forest land which would find its highest use in growing forest products. Often he cited that the 400 year-old city forest of Zurich, the Sihlwald, was returning an annual net income of \$12.00 per acre. In Wisconsin, early logging took only the best pine, leaving smaller pines and currently less valuable species. Groups of saplings and seedlings had come in following logging. It was these values with high potential for the future that he wanted to protect. The indifference of the people to brush fires consuming this young growth was to him the most discouraging feature of the fire problem in the state.

The first step was to appoint town fire wardens. These men were empowered to post notices prohibiting burning in dangerously dry times and to prosecute violators. They were to take action on fires and had authority to impress crews if necessary. Their pay and that of their crews was set at \$0.20 an hour, to be paid by the town after the payrolls had been approved by the state forester. Not all of the towns appropriated money for this purpose.

In 1904 the 249 fire wardens reported 140 fires averaging more than 400 acres of burned area, with 60 percent of the fires caused by land clearing. Then in

1905 the fire laws were strengthened. The rather drastic provision that district attorneys and magistrates were required to take action on fire law cases brought to them, or be themselves subject to prosecution, would indicate the Legislature was in earnest. Yet town appropriations for fire control were limited to \$100 per survey township.

Railroads were required to reduce fire hazards on their rights-of-way and to maintain locomotive netting so that sparks would not be thrown from smokestacks nor coals dropped from ash pans, while train crews were to report fires at the next station and section crews were to extinguish them. But Griffith also knew the importance of winning cooperation, for by 1906, he had won agreement that the burning of discarded railway ties would be postponed until after snowfall. On August 11, 1908, he spoke to a meeting of more than 300 section men and other employees called at Antigo by the division superintendent of the Chicago and Northwestern Railroad. After explaining their duties under the fire laws, he pointed out that forest products constituted most of the freight haul on which their employment depended. Addressing himself to the roundhouse crews he asked for their cooperation with his newly appointed locomotive inspector. Only cooperation would help on this point and it was not

until 1911 that the inspector could order a locomotive out of service until required repairs were made. Other meetings at Ironwood, Michigan and with employees of the Omaha and the Wisconsin Central railways followed.

Because similar conditions in the region called for uniform legislation, Griffith proposed consultation and the First Lake States Forestry Conference was held at Saginaw, Michigan, November 13-14, 1907. The list of delegates included such illustrious names of the early forestry movement as: General C. C. Andrews and Professor S. B. Green of Minnesota, Commissioner C. W. Garfield and Forest Warden Filibert Roth of Michigan, University of Wisconsin President Charles R. Van Hise and State Forester E. M. Griffith of Wisconsin, Dr. B. E. Fernow and Professor E. J. Zavitz of Ontario, Elwood Wilson of Quebec, and H. H. Chapman of the U.S. Forest Service. The second conference was held at Madison, December 9-10, 1908, with much the same representation from Minnesota, Michigan, Wisconsin and Ontario, but with Wm. T. Cox representing the Forest Service. The third conference at St. Paul, December 6-7, 1910, was specifically devoted to the forest fire problem. At the Michigan conference, it was agreed that piling and burning of logging slash should be required, but the main conclusion was that each state and province was to designate representatives to draft needed legislation and issue a call for the next meeting.

To be sure of his backing, Griffith had arranged for a meeting of the Timber Owners' Association of Wisconsin at Eau Claire a week before the Madison conference and the resolutions there adopted were largely based on the Eau Claire recommendations. Having just passed through the disastrous fire season of 1908, members attending the conference recognized that forest fires in the Lake States during any dry season readily take on enormous proportions; so that we are dealing with great calamities . . . and therefore, Resolved, that forest fires, being one of the greatest enemies of the state and thus akin to riot and invasion, the Executive power of the state should be employed to the utmost limit in emergencies, in their suppression and control for the protection of the lives and property of the people. Other resolutions urged that: loggers be required to dispose of slash left in logging operations in such a manner that it shall not be a menace to the forest, with the land or logs to serve as security for payment of fines, a patrol system be established and financed by a charge on unimproved and unoccupied lands; and a county rather than a town fire warden system, with payment of firefighters to be made by the state, but with at least a part of the costs charged back to the county.

No Wisconsin legislation resulted except that Chapter 119, Laws of 1909, specifically authorized locomotive inspection, which some railroads had challenged. This act also empowered the state forester to order patrols to follow trains in periods of high hazard, and railroad employees on light three-wheeled *pedals* propelled by a rowing-like motion did extinguish many small fires set by the preceding train. The first reports of the town fire wardens showed that railroads caused some 5 percent of the fires, but this rose to 15 percent in 1908 and to 21 percent in 1910.

At the St. Paul conference of December 1910 there was strong representation of the railroads and lumber companies. This time, the conference receded from its former advocacy of a general slash disposal law as impractical and even dangerous and turned to the requirement of cleared fire lines around standing timber and near settled communities. Again a county system of fire wardens, payment of firefighters by the state and a charge-back to the local communities was endorsed. The 1911 Legislature, under Chapter 601, took the appointment of fire wardens out of the hands of the state forester to make town chairmen and road superintendents *ex officio* fire wardens. As Griffith pointed out in his next biennial report, the towns where the problem was the greatest were sparsely settled, had few roads and usually no road superintendent. The state forester was, however, empowered to appoint special fire wardens whose time and firefighting payrolls were to be paid by the county, with reimbursement of half of such sums by the state. Thus the long recommended procedure on firefighting costs was reversed, resulting in unreasonable delay in payment because such bills required approval by the county board. A lumberjack working on a fire might be in another state before the next county board meeting. Naturally this law was ineffective.

The St. Paul conference repeated its recommendation for patrolmen for the purpose of earlier detection and action on fire which might otherwise smoulder or burn for days. More significant was recognition of poor transportation and communication in the north and so they called for trails, lookout stations and telephone lines. It may seem strange that transporting such a vast volume of logs did not leave a serviceable network of roads. At first, logs were hauled on ice roads in the winter to the banks of a stream and the *drive* in the spring floated the logs down to the sawmills. These sleigh-haul roads avoided adverse grades and many crossed lakes or swamps that could not be traversed in the summer.

Tote roads built to haul the winter's supplies to logging camps led nowhere else. The later logging railroads were built to good grade, but these also

fingered out into the back country from some main line railroad. Thus, they did not connect with the railroads of another lumber company hauling to a different main line, or to another point on the same common carrier railroad. Naturally, there was some crossing of various logging railroads and portions of old sleigh-haul or tote roads. Only by scouting such connections was it possible for a band of Chippewas to drive several teams of ponies hitched to buckboards all the way from Couderay to visit their fellow tribesmen on the Lac du Flambeau Reservation in the summer of 1906.

Nor was it unusual for a farmer from a settlement to the south, seeking winter employment for himself and his team of horses in some logging camp, to drive on some portion of a main line railroad. With extra planks on his wagon, he could lay them between the rails to provide footing for the horses when crossing railroad bridges. On a longer bridge, the horses would stand while some planks already crossed were carried forward.

Truly, transportation to reach a fire was one of the major problems. Of course, men with hand tools could walk, but with a team of horses, plowing several furrows before setting a backfire was much more effective. Despite all the limitations on effective action, it appeared that some progress was being made. In both 1906 and 1907, the burned acreage was held to less than in the preceding biennium.

Then in 1908, Griffith's report to the State Board of Forestry contained the following:

It was not until late in August that the real seriousness of the fires became generally known or realized. No rain had fallen for weeks; swamps were beginning to dry out; streams became rivulets and rivers ran low, causing a cessation of work where water power was depended upon; the underbrush was dry and parched, even the dense forest growth, where moisture is usually retained in the humus, was dry and the trees themselves showed evidence of the drought; the slashings were nothing but a mass of dry wood and shriveled leaves awaiting only a spark of fire to ignite and spread destruction. . . . Early in September, fires prevailed in nearly every one of the thirty-two counties in the northern part of Wisconsin. The smoke, combined with that ascending from the fires in Michigan, hung like a pall over the surrounding country, impeding navigation on the Great Lakes and extended as far south as Chicago. . . . Farmers and settlers, who had watched the burnings of slashings with but poorly concealed satisfac-

tion, became alarmed when the flames threatened to wipe out their crops, homes and outbuildings. In dozens of small communities, the onrush of flames meant destruction of not only property but human life as well and the entire population turned out to battle the common enemy, while railroad cars, to which locomotives with steam up were attached, were held in readiness to carry women and children to safety.

This was not merely an attempt at colorful writing on Griffith's part, but factual reporting. His wardens recorded 1,435 fires which burned over 1,209,432 acres, and in their course destroyed farm buildings, livestock, school houses and bridges, and almost 500 million board feet of timber, of which about half could be salvaged. Of the total reported fire loss of nearly \$9,000,000, two-thirds represented the value of forest growth below merchantable size. Total firefighting cost to the towns was \$43,380, but there were many volunteers and the lumber companies incurred costs of \$55,820. The latter item plus losses incurred doubtlessly prompted the endorsement of Griffith's proposals for better protection from fires by the Timber Owners' Association meeting at Eau Claire the following December. Lack of action until it was too late was a major factor during that fire season, but this was in turn based on the obsession to clear land. The report for this year recounted the case of five men who were fined \$5.00 each for setting fires, after which they asserted that the fires had saved them many times that sum in the expense of land clearing.

The Legislature of 1909 did not respond to Griffith's plea for a fire patrol system. Opponents held that the acreage burned in 1908 was exceptionally high and there was no need to be prepared for conditions which would probably not occur again for many years. This held true for 1909 when only 166,000 acres were burned over. But in 1910, the burned area rose to 802,833 acres with reported losses of over \$5,000,000, and firefighting costs to the towns equaled those of 1908. The public simply was not ready to accept fire prevention and early detection, nor the potential value of young forest growth. Land was meant to be farmed.

FOREST TAXATION, along with fire, constituted the primary obstacles to forestry by private enterprise. The third objection voiced by timberland owners, the element of time, Griffith dismissed because their forest lands could be kept productive by conservative cutting and slash disposal, while the remaining immature trees would respond with accelerated growth. Aware of the vastness of the problem, his interest extended beyond



Vast acreages of logged over, burned-over land characterized Wisconsin's north when Griffith came to this state. One of the objectives of the forest reserve was to acquire some of these "wastelands" on which to grow timber.

the state forest preserve. In the first of his biennial reports, he stated the case for forestry as a profitable undertaking. Admitting that timberland owners do not get the best returns in the few counties with extensive virgin forests, Wisconsin was now passing out of that stage, for pine stumpage prices were rising, hardwoods and hemlock were becoming valuable and it had been proven that a fair quality of paper pulp could be made from jack pine. Pine stumpage had increased steadily for 50 years, regardless of fluctuations in the lumber market. Cutting of hemlock was becoming important and hemlock stumpage had gone from \$1.50 to \$4.00 per thousand board feet in the last three years.

"Forestry is a good, practical business proposition for anyone who wants an unusually safe long-time investment, and therefore it is more suitable for corporations, who are always looking well into the future, than it is for the average individual." In those days of sound money backed by gold, the present argument for forest property as a hedge against inflation was not available to him, so while Griffith presented the case for forestry by the individual and urged better management of farm woodlots, he

emphasized forestry for the wood-using industries. "However, to build a lumber mill only requires a relatively small capital and as it can be located and run almost anywhere, irrespective of water power, it is in its nature somewhat migratory. But a large paper mill requires a very heavy outlay to build the mill, for machinery and for a large and valuable waterpower. Thus, the locations for paper mills are both limited and fixed and when a valuable waterpower has been acquired and the mill built, the question of a sufficient and lasting supply of pulpwood within a reasonable distance becomes all important. Therefore, the paper mill companies should be the first to see that forestry is particularly well adapted to their business, as it will insure them a steady supply of raw material." He added that their timberlands should largely be located at the headwaters of their rivers to help in stabilizing stream flow for their water powers. "Such a corporation should, first of all, employ a forester . . .", he urged in 1906.

To appreciate the impact of taxation, it is necessary to understand the nature of a forest managed for sustained yield and annual income and which requires

an adequate level of growing stock with proper distribution of age classes. In contrast to a farm or a rental building where sale value reflects income, the sale value of a forest has traditionally been based on its present liquidation value. Being taxed on their wrecking value, it followed that forests were cut as rapidly as possible to escape confiscation; so the sawmills ran on two 10-hour day and night shifts. To Griffith, the resultant depleted tax base was less important than the plight of communities which had lost their industries with exhaustion of the raw material from the forest. "To appreciate this, one only needs to visit towns in which the sawmills have shut down on account of lack of timber." The term "ghost towns" had not then come into use.

"The whole system of forest taxation in this country is wrong, for it puts a premium on forest destruction. Would our farmers have something to say and would they be as prosperous as they are, if their growing wheat or corn were taxed every day? And yet a crop of timber, which may take from 40 to 150 years to grow and be ready for harvest, is taxed every year. in order to be perfectly just and also to encourage the owner to let his timber grow until it is mature, and then cut conservatively, so as to place his business on a permanent basis, there should simply be a tax on the land and none on the timber until it is cut."

This theme, repeated in each of his subsequent reports, becomes more specific. A forest tax law should provide for: an application by the owner, examination of the land and approval of the proposed cutting plans, a contract between the state and the owner, listing of lands with the assessor who shall assess the land, reports of cut products by the owner with penalty for failure to report or making false report, and collection of a 10 percent severance tax.

Legislation along this line was endorsed by the Timber Owners' Association at Eau Claire on December 1, 1908, at the second Lake States Forestry Conference, and by the Conservation Commission (appointed previously in that year), which referred to the present method of taxing timber lands as "hostile to the forestry interests of the state." With no gains from the 1909 Legislature, Griffith used his contacts to win a cooperative agreement with the U.S. Forest Service in April of 1910, under which they would conduct a study of the subject. This resulted in the publication "The Taxation of Lands in Wisconsin," by A. K. Chittenden and Harry Irion of the Forest Service, a synopsis of which is given in the 1910 Report of the State Forester. By this time Wisconsin, which led all the states in lumber production at the turn of the century, had dropped to fifth place but still ranked second in production of white pine. While

reviewing the statewide situation, the study centered on the north and especially on Bayfield, Douglas, Florence, Forest, Iron, Marinette, Price, Rusk, Sawyer and Vilas counties. For these ten counties, 65 percent of the total land area was reported as cut-over, with a large part of the remainder more or less culled over for white pine. Douglas County had been logged to 95 percent of its area.

As was to be expected under Wisconsin's system of town assessor, whose only necessary qualification was to win enough votes, the study found that the tax burden imposed on forest lands of the same value was not uniform, either between different counties and towns or between different owners in the same town. Though in many cases unfair as to timberlands, in general cut-over lands were overassessed compared to either farms or timber. But with depletion of the resource, the tax burden was beginning to weigh more heavily on the remaining timber. While some lumber companies would not sell cut-over lands to settlers because this would lead to demands for roads and schools and further increase taxes, still the needs for such public improvements were increasing throughout the north. Taxes at first had not forced the cutting of timber, but the situation was now becoming more serious because of the growing trend of local government to complete public improvements while there was still timber to be taxed.

This marks the beginning of a race in which both parties were bound to lose: the local units of government to build schools, roads, bridges and courthouses before the timber was gone; the lumber companies to "cut out and get out" before timber values were confiscated by taxation. At this point, it must be remembered that even where assessment was fair, it was still based on immediate liquidation value; the valuation of timber to be cut in future years was not discounted to date. But the report urged no favoritism for timberlands, rather it stated: "if forestry cannot be made to pay without granting it special favors, it has no place in the business world of today." But to provide equitable taxation, it again recommended an annual tax on the land and a tax on the timber when it is cut. The basic principle here is that land represents capital which is properly taxed annually, but the timber being the income from the land should be taxed only when it is cut and the income is realized. Because of the fire hazard, the authors concluded that such a tax would not greatly stimulate private forestry but urged it as a step in the right direction. It would remove one uncertainty as to future carrying costs on a long-term investment.

In one of my last conversations with Griffith, he expressed his disappointment that the timber interests

had never given him adequate support in his efforts for tax reform. It was not destined to come for two decades, when the flood of tax delinquency certificates on cut-over lands accumulating in some of the new courthouses finally forced action.

THE MENOMINEE RESERVATION held special interest for Griffith. On the other Indian reservations in the state, the lands had been allotted to members on the tribal roll and the stands of pine were being logged under federal contract with no restraints on cutting practices. But the Menominees had successfully resisted federal pressure to accept allotment to individuals, so that it remained one property. Quoting from his 1906 report:

It can safely be said that the forests on this reservation are the finest in the state, and as they are on the Wolf River, they are important in conserving a uniform stream flow and also in supplying industries in that part of the state with their raw material. Gradually forestry regulations should be introduced in the logging operations and only mature, ripe timber, of which there is an enormous amount, should be cut and the slash piled and burned to prevent forest fires and cuttings so arranged that the growth and reproduction of the most valuable species will be favored.

Up to the present time, only pine and hemlock had been cut as all logs were driven to sawmills via water courses and these species are floatable.* But now two railroads are building across the reservation and therefore, even if sawmills are not built, there will be a ready sale for the fine hardwoods which predominate in the western portion. As the Indians log their own timber, there is every reason why they should use the most careful forestry methods, for properly managed, their forest will be of great value both to the tribe and the state.

While he failed to refer to the fact that the tax problem did not apply to the reservations, he did point out the plain duty of the government, as guardian of the property of the Indians, to see that the timber on the reservations is cut as carefully as possible, so that the Indians will always have work and a steady income from the lumbering operations. With logging contracts already in effect on the several Chippewa reservations little could be done there, but the Menominee Reservation offered a great opportunity. In his first report, Griffith referred to a cooperative

agreement between the Department of Interior, the U.S. Forest Service and the State Board of Forestry regarding the Menominee Reservation. This agreement was made in April of 1906, but according to J. P. Kinney in his book *Indian Forest and Range*, the bill submitted by the interior Department on January 6, 1906 to facilitate salvage of some 5 million board feet of white pine blown down by the wind storm of the preceding July 16, had been drafted by J. R. Farr, General Logging Superintendent for the Indian Service, and Griffith acting as a representative of the U.S. Forest Service. After enactment, these two drafted the regulations to govern the logging, which were subsequently approved by the two federal departments, and John W. Goodfellow was appointed as logging superintendent on Griffith's recommendation.

Continuing his interest in forestry after leaving the governorship for the U.S. Senate and serving on the Indian Affairs Committee, Robert M. LaFollette won passage of his Menominee Reservation Bill as the Act of March 28, 1908 providing for construction of tribal mills and prescribing an allowable annual cut of 20 million board feet of such fully mature and ripened green timber as the Forest Service shall designate, plus any dead or down timber. At the request of the Indian Service, the Forest Service sent several men to mark timber for cutting. One of these, William Morris, who was transferred from a national forest in the west, stated that Griffith spent much of his time from November 1909 to January 1910 instructing the marking crew in applying the set of guiding rules which he had drafted. Morris also had a copy of a report by Griffith signed as Special Investigator, indicating his connection with the Forest Service. A letter from Griffith to William T. Cox, dated December 10, 1909, reported that slash disposal was not being done, that the new logging superintendent employed by the Indian Service had a previous record of incompetence, and that failure on the present job would presumably be excused on the grounds that economic logging could not be done under forestry regulations. The letter concluded: "The lumbermen of this state are now watching the experiment on the Menominee Reservation very closely and they will be only too glad of any excuse to give it a bad name if they can."

Unfortunately, the Forest Service could not designate the areas to be logged nor exercise any control over the logging operations. Then a fire in July, 1910 changed the entire course of operations because of the need to salvage fire-killed timber. Also, a conflict between the U.S. Forest Service and the U.S. Department of the interior was developing over the

*Most hardwoods would sink, while pine and hemlock were float timber for log drives down the river.

Forest Service management practice of clear cutting the Reservation pine. The difference led to the abrogation of the cooperative U.S. Forest Service - U.S. Department of the Interior agreement under the Menominee Reservation Act of 1908. With this action, Griffith severed his association with the U.S. Forest Service in the project.

FOREST INFLUENCES AS THEY AFFECT WATERS was repeatedly stressed by Griffith. From his travels and European studies, he had an understanding of this subject equaled by few Americans of his day. In his first report of 1906, after dismissing the belief that forests can cause significant increase of rainfall in humid regions, he explained how they stabilize streamflow by the effect of their shade in retarding snow melt in the spring, while humus and forest litter and the permeable soil favor the infiltration downward to replenish ground waters which are released more gradually. In subsequent writings, he covered the subject in greater detail, including soil erosion on open lands, the silting of rivers and reservoirs, in contrast to the clear water flowing from the forest. Yet, with a knowledge of Swiss engineering structures to establish a base level of erosion, he accepted the value of dams to supplement the natural reservoirs of lakes and swamps at the headwaters of the Wisconsin and Flambeau rivers. Just as the Swiss foresters had supplemented the work of the engineers by reforestation, so he strove to develop a forest as a necessary complement.

The natural water storage capacity of the lakes in the forest reserve had already been supplemented by numerous dams built during the days when logs were driven down the Wisconsin and Flambeau rivers. Some of these old dams had also connected chains of waters like the Eagle River, Lac du Flambeau and Manitowish Lake where steam tugs had towed booms of logs.

Many of these dams needed replacement because the logs were decaying and additional dams for water storage were desirable, but the constitutional restriction on works of internal improvement precluded a state project. "This being the case," quoting from the 1907-08 Report of the State Forester, "and as it was extremely important that the work should be done, the Legislature of 1907 was requested to consider and finally passed an act authorizing a private company to construct and operate such reservoirs, but under the supervision of the state. So far as is known, no similar law has ever been passed by any other state, nor has any private corporation ever undertaken any such work and, in view of the wide interest which was taken in the measure and as it is believed to be a remarkable

piece of legislation in the interest of the people of the whole state, the most important sections of the act are here given."

To summarize its provisions: The Wisconsin Valley Improvement Company was authorized to construct, acquire and maintain a system of reservoirs on the upper Wisconsin River and its tributaries for producing a uniform flow of water to improve uses of the stream and to reduce flood damage. After successfully operating with a capacity of 2 billion cubic feet above natural storage, the company was empowered to collect fees from the owners of downstream water powers on the basis of benefits received. All fiscal matters of the improvement company and the tolls levied on water powers were placed under the supervision of the State Railroad Commission, but approval of construction of dams and maximum and minimum water levels were subject to the State Board of Forestry. A similar act subsequently provided for the Chippewa-Flambeau Development Company. At the headwaters of the Wisconsin River there were already 16 reservoirs with a storage capacity of 3,370,000 cubic feet in summer and 4,660,000 in winter.

The Special Legislative Committee on Water Powers, Forestry and Drainage created by the 1909 Legislature devoted most of its studies to water power. The records of this committee show that Griffith was cross-examined on this matter and its report includes as Exhibit 28 his statement: *The Intimate Relation of Forests to Stream Flow*. It was reprinted in the 1909-10 Report of the State Forester.

EDUCATIONAL EFFORT was clearly required, for only recent immigrants from continental Europe had any concept of forestry. The first annual report begins with the statement: "Forestry is the systematic management of forests to obtain successive crops of timber." Also, in the light of subsequent events: "It is one of the tenets of forestry that no land shall be held permanently under forests which is more suitable for agriculture." The ability of forests to reproduce naturally after cutting was discussed in Griffith's first and following reports. The second contains excellent notes on the silviculture of white and Norway pine,* hemlock, basswood and white spruce. He found it necessary to refute the common saying of woodsmen that pine will not follow pine, explaining that the new stands of aspen came in only after fires had eliminated most of the pines as a source of seed.

Numerous lectures, often illustrated with lantern slides depicting German forestry practices, were given before various clubs and associations throughout the state. It was usually necessary to explain that forestry was not concerned with shade trees or landscape

*Now known as red pine. The former name was derived from the appearance of its lumber from mills at Norway, Maine, as the stands of white pine were depleted.

planting, but with growing timber for use. If it doesn't pay, it isn't forestry. The two basic purposes are production and protection. Specially designated protection forests may not be needed here as they are in Switzerland, but all forests retard runoff of surface waters, thus reducing goods and soil erosion.

During the winter of 1907-08, Griffith gave a course of 16 lectures to 164 students at the University. This was not in the nature of professional training; rather he sought to give students, some of whom might in the future give support to his cause, the basic

concepts and an appreciation of forests, so inherent a part of the culture of central Europe. But he thought also of children, for he contributed articles for the Arbor Day Annual stressing forestry rather than tree planting. In his 1909-10 report, he advocated that the principles of forestry should be taught in schools and quoted from Circular No. 130 of the U.S. Forest Service by Hugo A. Winkenwerder, which advocated not another course of study but correlation of the subject with other studies. Incidentally, Winkenwerder was a native of Watertown, Wisconsin,



Forest reserve lands also included forest areas along the major rivers and around scenic northern lakes.



Another purpose for forest reserve land was to aid in retaining the wood-using industries within the state by supplying them with timber.

FORESTRY IN THE BADGER STATE

VAST SCHEME TO CREATE A
3,000,000 ACRE WOODLAND
RESERVE.

FOR CONSERVATION OF NATURAL
RESOURCES AND CREATION
OF RESORTS.

Many people, if asked what forestry is, would tell you that it is the planting of trees for the purpose of growing them into forests and that the forester is one who sets the trees and cares for them. And on a small scale such a conception of the meaning of terms might be excused. But in the economy of nations and of commonwealths forestry is a science and the forester worthy of the name is a scientist and not a tree planter. Forestry, generally speaking, is the systematic management of forests to obtain successive growths of timber but in Wisconsin it has a still wider significance for it not only comprehends the preservation of the forests of the state but it contemplates also the conservation of the waters at the sources of all the principal rivers of the state as an asset that in the years to come will be of inestimable value to the people. In fact forestry as it is pursued in Wisconsin has three chief ends in view:

First—The protection of the headwaters of the principal streams of the state for the purpose of conserving the waterflow for power purposes, etc.

Second—The acquirement of 2,500,000 to 3,000,000 acres of the waste lands of the state whereon to grow timber for commercial purposes;

Third—To create in the northern portion of the state where there is a vast number of small but beautiful lakes, a great summer resort such as there is not nor ever can be in any other state in the union.

To accomplish these purposes the legislators of the state have passed laws creating a state board of forestry and providing for the appointment of a forester who shall be technically trained in that profession. This board is at present made up of the following persons: President Charles R. Van Hise of the state university; Professor H. L. Russell, dean of the college of agriculture; E. A. Birge, director of the state geological survey; Frank L. Gilbert, attorney general of the state and George Beyer of the city of Oconto. The state forester is E. M. Griffiths, technically trained in the science of forestry, and his assistant, Frank B. Moody, a man of large practical experience and an expert forester.

The law prescribes the duties of the state board of forestry and of the forester in a general way but grants a large license in the adoption and pursuit of the policy to be pursued so that under the law and the policy outlined by the state board and the chief foresters Wisconsin has become—in the few brief years since these laws were enacted—chief among the states in the pursuit of a plan of forestry and of conservation of natural resources. In truth the badger state scheme of forestry is the broadest and most comprehensive of any in the union and the example of the state is pioneer in the movement that has so

recently prompted the president to call at Washington a meeting of the governors of the states and a large company of scientists and specialists to consider for the nation the very thing that in Wisconsin has become an established policy. This meeting will convene at Washington May 13 to 15 and among those from Wisconsin who will attend will be Governor Davidson and his private secretary, Colonel O. G. Munson, Senator J. H. Stout of Menomonie, Mr. George Whitling of Neenah, State Forester E. M. Griffiths, President C. R. Van Hise of the state university, and William Irvine of Chippewa Falls, president of the National Wholesale Lumber Dealers' association. And it is confidently expected that out of the meeting will grow results that will have a large bearing upon the future of the country in the way of husbanding the resources of the nation.

But this is aside from the great plan that has been adopted in Wisconsin. By the enactment of the forestry law of 1905 the state turned over to the board of forestry all the state land north of town 33—the north boundary line of Taylor county—to constitute a forestry reserve. These are chiefly in the counties of Ashland, Bayfield, Burnett, Douglas, Florence, Forest, Rusk, Iron, Langlade, Lincoln, Marinette, Oneida, Polk, Price, Sawyer, Vilas and Washburn and constitute a total of 234,072 acres. Some of them are of course suitable for agricultural purposes and as a market develops they are sold and

a graduate of the University, and a teacher of biology in the Sheboygan High School, who then studied forestry at Yale and later became Dean of the College of Forestry and finally President of the University of Washington. The first appointment of a forester as president of a great university is noteworthy.

But while promoting instruction, Griffith was also indoctrinating his more influential associates. Governor Robert M. LaFollette had traditionally sought the help of experts, notably from the University, in developing and guiding his programs and some of his contributions to the advancement of forestry have already been noted. His successor, James O. Davidson, played a prominent role at the May 1908

Conference of Governors at the White House called by President Theodore Roosevelt to consider the conservation of natural resources. On his return, Governor Davidson appointed a State Conservation Commission (which is not to be confused with the later administrative commission of the same name established in 1927). This first Conservation Commission was to consider and report on the best methods for conserving the natural resources of the state and to cooperate with the national Conservation Commission appointed by President Roosevelt. Those appointed to the state commission were: President Van Hise of the University; Dr. E. A. Birge, Director of the Geological and Natural History Survey; E. M. Griffith, State Forester;

Senators J. H. Stout and H. P. Bird; and William Irvine and George A. Whiting from the lumber and paper industries. All of them except Dr. Birge and Senator Bird had participated in the White House conference. Van Hise also was on a nation commission as a member of the division on mineral and Irvine served with the division on forests.

As with the State Board of Forestry, Van Hise was chairman and Griffith the secretary. The governor had called on all state departments to compile such report as might be required by the commission. At the meeting of December 11, 1908, in addition to recommending legislation for better forest fire control and for equitable taxation of forest lands, the commission urged an increase in the \$9,800 appropriation to permit more adequate administration of the state-owned lands in the forest reserve. An increase in the \$10,000 annual appropriation for land acquisition was urged while large tracts could still be purchased from lumber companies. The state can unquestionably purchase these lands in the near future at a much lower rate than will be possible after the tracts are divided and are in the possession of numerous small holders. To provide funds for land acquisition, the commission proposed that the State Board of Forestry be empowered to issue certificates of indebtedness on the forest reserve lands in an amount not to exceed \$1,000,000. In his biennial report which included these recommendations, Griffith explained that this indebtedness was to be retired by a tax levied on the water powers protected by the forest reserve and that the attorney general had endorsed this plan as constitutional. As an alternative, he suggested a general property tax of one-tenth mill.

The Conservation Commission also approved a request to Congress to grant the state all unsurveyed and unallotted islands in inland lakes north of Township 33. Actually, this constituted endorsement of earlier action, for Griffith had transmitted to President Van Hise a copy of a letter dated June 15, 1908:

Hon. James R. Garfield
Secretary of the Interior
Washington, D.C.
Dear Sir:

The State of Wisconsin has now created a forest reserve of 300,000 acres in the northern part of the state and we intend to increase this area very materially by purchase or otherwise. Two counties, Oneida and Vilas, have over 1,200 lakes, and in these lakes, there are beautiful islands which are as yet unsurveyed.

I am informed that last year a Mr. Shepard of Chicago, through the General Land Office, had a survey made of the islands in Presque Isle and Crab

lakes in Vilas County and that he filed script upon them. It is our intention, at the next session of Congress, to secure introduction of a bill providing that all unsurveyed islands in inland lakes nor

the of Town 33 shall be granted to the state as an addition to the forest reserves.

I do not suppose it is possible to prevent Mr. Shepard from acquiring the islands in Presque Isle and Crab lakes, though it seems a pity as I am informed that he is securing the same for purely speculative purposes, but I would earnestly request that, if possible, no other islands north of Town 33 be allotted before the state has had an opportunity to secure passage of a bill as outlined above.

One of the main objects of the forest reserve is to provide beautiful and healthy camping sites for not only the citizens of Wisconsin, but nonresidents as well, and it does not seem right that the fairest spots of all, the islands, should fall into the hands of speculators.

Yours truly,
J. O. Davidson

To which copy of the governor's letter, Griffith had added: I am of the opinion that there is a very good chance of our being able to secure passage of the above measure and I would suggest that the State Conservation Commission request our delegates in Congress to make every effort to secure its passage at this session.

Though this effort was not to be successful until later, Governor Davidson's letter was effective in stopping further conveyance of islands in the meantime.

THE U.S. FOREST PRODUCTS LABORATORY at Madison was formally opened June 4, 1910, but its location here was not by mere chance. In his report of 1908 to Van Hise as chairman of the Conservation Commission, Griffith included a statement that the Forest Service had for some years been operating laboratories for timber testing, seasoning, and preservative treatment of wood, making paper pulp from woods hitherto unused, and determining processes for the utilization of low-grade materials. These laboratories have been located at different points, and to secure greater efficiency, the Forest Service wishes to combine them at some first class engineering college. Among the universities under consideration were Michigan, Illinois, Purdue and Wisconsin. The Forest Service will install machinery worth some \$14,000 and pay the salaries of employees amounting to \$28,000 annually. The cooperating university to provide space, heat, light and power.

After indicating the value of the laboratory to the paper industry of our state, he concluded: "I have excellent reason to believe that if the regents of the University will appropriate \$25,000 to \$30,000 for a building, Wisconsin can secure these laboratories." Quoting from the Madison Democrat of December 3, 1908: "More recognition for Wisconsin! If the University regents accept the proposition of the United States Forestry Commission, the government will concentrate its forestry experimental laboratories at the University of Wisconsin. State Forester Griffith received a visit from one of the officials at Washington, and will take up the proposition with the regents at the meeting December 14. . . . Forester Griffith and Dean Turneure are quite enthusiastic over the matter and feel sure that the regents will appropriate the sum, which is small in comparison to the advantage of having such a laboratory here." The regents adopted a resolution to enter into this cooperative project on December 16, and by joint Resolution No. 39, the 1909 Legislature authorized use of an estimated \$41,000 of the University building fund for construction of the laboratory. Correspondence on this subject includes letters by Griffith, and he served on the committee on arrangements for the formal opening of the laboratory, along with Professors Julius Olson and J.G. D. Mack.

Griffith stated briefly in his 1911-12 report: "In connection with the University of Wisconsin, a successful effort was made to have the U.S. Forest Products Laboratory located at Madison."

Also in the field of wood utilization was the 1910 joint publication, Wisconsin Wood-Using Industries, by Franklin H. Smith and H. S. Sackett of the U.S. Forest Service. It covered wood uses in the manufacture of finished products, but did not include sawmills or the lumber used in further manufacture or construction. It is noteworthy that 49 percent of the wood used in manufacture came from outside the state; the major imports being spruce for the paper mills, western pine for the sash and door mills, and, of course, tropical and other cabinet woods not native to the state. Reference to the use of white oak, hickory and ash for wagons, carriages and sleighs recalls the importance of horse-drawn vehicles in those days.

STATE PARKS, though sharply distinguished from forests, were an early and continuing interest to Griffith. The Forestry Act of 1905 had directed the Forestry Board to visit points of "natural interest" and to report on suitable areas. Another act then provided

for a Park Commission to report on Devil's Lake and the Dells of the Wisconsin River, and Governor LaFollette included Griffith as one of the three appointees. At that time there was only one state park, Wisconsin having acquired some 600 acres in 1900 as part of the Interstate Park including the Dells of the St. Croix River. This park had first been proposed by Harry D. Baker of St. Croix Falls, and after it was authorized, he was appointed to the Park Commission.

U. S. LABORATORY FOR WISCONSIN

FORESTRY OFFICIALS TO CON-
CENTRATE ALL TIMBER EXPER-
IMENT STATIONS AT U. W.

REGENTS NEED ONLY PROVIDE
BUILDING—GREAT SIGNIFI-
CANCE TO STATE.

More recognition for Wisconsin!
If the University regents accept the proposition of the United States forestry commission, the government will concentrate its forestry experimental laboratories at the University of Wisconsin. State Forester Griffith received a visit from one of the officials at Washington, and will take up the proposition with the regents at the meeting December 14.

The government has laboratories for timber tests at Washington, Purdue and other places, and is contemplating a concentration of them at some strong engineering college. On account of its strength, and the great amount of research work, the Wisconsin institution has been selected. All the government asks is a place to install its laboratories, and as no building on the campus is large enough, the regents are asked to erect a structure at a cost of \$25,000. The government will install machinery at a cost of \$14,000, and the yearly payroll will amount to about \$28,000. Forester Griffith and Dean Turneure are quite enthusiastic over the matter, and feel sure that the regents will appropriate the sum, which is small in comparison to the advantages of having such a laboratory here.

Madison Democrat, Dec. 3, 1908

Both because of his location and his knowledge of real estate, most of the workload of land purchase was carried by him. Minnesota acquired the lands on the west side of the St. Croix River, and for some years the park was used mostly by people from St. Paul and Minneapolis, who could ride Sunday excursion trains to Taylor's Falls. In 1905, the new Park Board received a biennial appropriation of \$10,000. The following session also required reports on the Territorial Capitol and an area in Door County and provided \$7,000 for parks. To assure a competent evaluation, the Park Board engaged the services of John Nolan, the eminent landscape consultant of Cambridge, Massachusetts. While Nolan had previously evaluated and endorsed the area now known as Peninsula Park, it must have appeared desirable to win support for the project.

Nolan's report, "State Parks for Wisconsin," published in January, 1909, recommended four areas: Devil's Lake, Wisconsin River Dells, Peninsula Park and the tract now known as Wyalusing Park, which had been urged by State Senator Robert Glenn. Many authorities in support of a state park program were cited. Apparently historical sites were not then considered as qualifying, for the Territorial Capitol was not included. The report specified that "the site for a state park should, above all, have a decidedly uncommon charm and beauty, a distinction among landscapes." Although acknowledging that Wisconsin had no sites meeting the standards for national parks, the chosen tracts, nevertheless, indicated an effort to approach those standards - the Interstate Park, for example, characterized by unusual geological formations, in the nature of natural wonders. Lesser sites and mere playgrounds were regarded as within the field of local government. Significant also: "The greatest confusion perhaps is between forests and parks. . . . The main essential and purposes of each are altogether different from the main essential and purposes of the other, and any confusion of them is sure to lead to waste and disappointment."

EXTENSIVE CONTACTS throughout the state were largely based on the need to indoctrinate leaders in an understanding of forestry and to win support for his cause. Thus Griffith continued to give lectures in many communities and while waiting for railroad connections, he would often call at the office of a local newspaper. A man of independent means, widely traveled and well read, he was an interesting conversationalist and well accepted in Madison. He participated in the organization meeting of the University Club on April 21, 1907, was elected the first treasurer,

the second vice president, and in November of 1909, the third president.

He was a member of the Maple Bluff Country Club, but his game, like that of Gifford Pinchot and Theodore Roosevelt, whom he so strongly admired, was tennis. It helped to keep him in good condition when office work kept him in Madison. Apparently, he had had his share of hunting in the Adirondacks and duck shooting in Maryland, for he was not known to have engaged in such sports during his years in Wisconsin. As an old German Forstmeister told me: "Hunting has a strong appeal to young foresters, but later, after one has moulded the forest into conformity with long-term plans, the response of the forest to treatment becomes far more fascinating." One must conclude that Griffith had attained that stage before coming to Wisconsin.

FOUNDATIONS FOR PROGRESS were being laid during the period 1904-1910. The nation was becoming conscious of the importance of forestry and was being warned of a coming timber famine. A major contribution was "The Conservation of Natural Resources in the United States" published by Van Hise in 1910. In Wisconsin, there had been some question as to whether the forest reserves might fall within the classification of works of internal improvement, and as such, prohibited by Section 10, Article VIII of the state constitution. To make sure, the Legislature of 1907 approved an amendment to permit the state to engage in forestry. Again in 1909, the Senate took formal action, but the Assembly did not. By joint resolution, however, both houses directed that it be submitted for referendum. In the general election of November 1910, the amendment was approved by a vote of 62,406 to 45,874.

Though the amendment carried in the counties where the forest reserve was being established, there was a definite local concern over the increasing area being acquired by the state and removed from the tax rolls. This had never been a factor in the western states, where the national forest had taken public domain lands in mountainous terrain that had never been on local tax rolls, and where vast reclamation projects met the desire for agricultural development by irrigation.

Believing that local insistence for development of farms could be overcome by a presentation of the facts, Griffith won support of his board for a soil survey, for he knew the character of the soils in this region with the shortest growing season in the state. Seven survey townships in Oneida and Vilas counties were chosen as typical and the soil survey was conducted under the supervision of Professor A. R.

Whitson, head of the Soils Department of the College of Agriculture. As summarized in the 1909-10 Report of the State Forester, there were four major soil groups:

Loamy sand (possible agricultural value)	22%
Sand to sandy loam, rough topography and usually stony (forest land)	72%
Jack pine sand plains (poor agricultural land)	4%
Marsh and swamp (forest land)	2%

It should be noted here that these townships did not include the good potato-growing area of these counties, nor the larger tracts of open sedge marsh. Griffith admitted that some of the wetlands might be drained for agriculture, but held that drainage should not be done until it was determined whether they were more valuable as natural reservoirs. Thus, he concluded that 78 percent was primarily more valuable for forestry.

Citing the 13,000,000 acres in northern Wisconsin awaiting development, much of it of the highest grade agricultural soil, there was no excuse for encouraging settlers to locate in an area where the best land held out only a fighting chance for meager success.

Wisconsin is so rich in her wealth of undeveloped lands and the state has so much at stake in the prosperity and happiness of the settlers, that the state should direct such settlement into the proper channels. The settler who locates upon nonagricultural land and finds after years of hard work that he can make only a bare living, naturally becomes very much discouraged and almost hopeless. In his first report Griffith had stated, "It is one of the tenets of forestry that no land should be held permanently under forests which is more suitable for agriculture, and every parcel of land within the state forest reserve will be examined with this in mind, so that land which is valuable for agriculture may be withdrawn and offered for sale." But by 1910, he had come to realize that isolated settlers never became farmers, but were deprived of the many benefits and advantages of communities, and if Wisconsin should allow settlers to locate on small and remote tracts within the forest reserve area, it would be doing a great injustice to the settler and storing up trouble for the state.

His statement that the forest rangers and their families would use a considerable portion of the possible agricultural lands sounds strange in the light of present knowledge. He was, of course, thinking of the intensive land use pattern in Germany, with which he was so familiar. There the forest employees of subprofessional grade had small subsistence farms, and supplemented their income by working in the woods. Farm horses were also available for skidding and hauling logs. It must be remembered that in 1910,

no one foresaw the replacement of horses with farm tractors. He did, however, plead for completion of the soil survey to cover the remainder of the reserve that was not agricultural land. As to the report on the seven townships, the findings were locally considered as besmirching the fair name of Vilas and especially Oneida County, because they minimized the agricultural potential of the area.

Meanwhile, a statewide interest in natural resources had developed. For a state without coal deposits, water powers were deemed of great importance; in fact, the then pending amendment to the constitution authorized state acquisition of both water powers and forests. Drainage districts in the large marshes of central Wisconsin were being organized. To evaluate these problems, the 1909 Legislature had provided for an Interim Committee on Water Powers, Forestry and Drainage composed of Senators H. P. Bird, Paul O. Husting and Henry Krumrey, and Assemblymen William M. Bray, George P. Hambrecht, F. W. Kubasta, and J. E. Thomas. An able and well-balanced committee, it may be noted that Senator Bird of Wausaukee was a prominent lumberman and a member of the Conservation Commission, while Senator Krumrey of Plymouth was a prosperous farmer whose services to agriculture are marked by a bronze plaque in front of the Old Dairy Building on the University campus. Many hearings of this committee were devoted to water powers and its records show that Griffith was questioned on this subject. Its report includes as Exhibit 28 his statement, "The Intimate Relations of Forests to Stream Flow," which was also reprinted in the 1909-10 Report of the State Forester.

The voluminous proceedings of this committee touched on forest taxation, but the hearing at Rhinelander on October 21, 1909 brought out perhaps the most interesting testimony on forestry and land use. After Griffith had stressed the need to protect from fire not only the old-growth timber, but also the smaller timber which had been left and the seedlings which had come in following logging, F. S. Robbins, a Rhinelander lumberman, explained that the lack of interest in fire control on the cut-over lands was due to low value.

"They were worthless lands, in other words, I sold some for \$1.50 per acre right close to Rhinelander, 9,000 acres, 8 or 9 years ago. These same lands were resold for \$2.50 per acre. Then they fell into the hands of the Blue Grass Land Company and they were sold at prices ranging from \$10-15 an acre. When the ignorant foreigner came over here, they got his last dollar. Then he goes

onto these lands without any money except what he puts into the land, and he cannot live. He has got pine stumps to contend with and poor sandy soil, and he has to abandon the land. . . . The land is sold too high, and even if it were given to the settlers with the stumps in, they cannot make a living.

W. E. Brown, in reply to Griffith's question whether he believed that with fire protection the present second growth timber will increase rapidly in value, answered: I do, I think there is no doubt about it at all. In fact, I can point to what is termed "cut-over" land in a great many cases, where today the land on which this second growth timber is standing is worth more to the man logging it than the original logging was worth. The chairman, Senator Bird, added: I want to confirm Mr. Brown's statement. I have seen thousands of acres of that sort in my portion of the country, and not over 5 or 6 years ago in the purchase of 12 forties that did not happen to be burned, I paid myself or our concern did, \$10,000 cash for what timber was then on it, which had been logged in earlier years but did not happen to be burned over. We paid that much cash and made money on it at that. Assemblyman Thomas noted that the increased values were perhaps ignored because "the added growth did not make much noise, but was everlastingly adding to the size of the trees."

From this meeting, the committee went on a field trip of several days to inspect the area of the forest reserve. Means of travel being limited in those days, the itinerary was to take the railroad from Rhinelander to Woodruff, then the logging train of the Yawkey-Bissell Lumber Company to Trout Lake, the wagon road to Boulder Lake and Island Lake, thence a motor boat through the Manitowish Chain to Rest Lake Dam, and wagon road to the railroad at Manitowish.

Many lumber companies had developed a farm in the days of sleigh haul logging, where horses could be pastured in summer and where hay and often potatoes were grown for the logging camps. Subsequently, these farms were used to show settlers the agricultural possibilities of lands the company had for sale. So, at Trout Lake the committee visited the farm of the Wright Lumber Company. But such a competent farmer as Senator Krumrey was not impressed, and commented: "it takes a rich lumberman to run a farm like this."

The section of the committee report on forestry, after commenting on land acquisition, continues:

"The lands of private owners are, however, scattered amongst the state holdings, and these should be purchased in order to enlarge the forest reserve and to render fire

prevention more effectual, which is possible only when the land is in a compact body. Because of the importance of growing timber in our state, in order that the prevention of forest fires may be made possible, and that our wonderful lake region may be made more beautiful and attractive to tourists by forest covered banks, and in order to conserve the waters at the headwaters of our principal rivers, and because of the fact that some parts of the land in the vicinity of the state forest reserve are not adapted to agriculture, your committee is of the opinion that the purchase of land to enlarge the state forest reserve should be continued until approximately two million acres have been secured. Much of this land can now be secured at a very low price. A considerable amount was bought by the Forestry Board in 1909 at \$2.50 per acre. This opportunity to buy at low price will not long continue - perhaps has already passed, and greater advance in price in the near future is believed certain."

The specific recommendations pertaining to forestry are summarized in three drafts of bills, given as Exhibits B, C and D of the report. The first of these seeks to clarify the powers of the state forester and provides for a county rather than the existing town fire warden system, with fire-fighting payrolls to be approved by the state forester, paid by the state, and then charged back to the counties. The second revises the fire laws, providing in addition to fine or jail sentence for those convicted of setting forest fires that they could also be held liable for fire fighting costs and payment of damage collectible in civil suit by landowners. The third proposed a state tax of two-tenths of one mill, to be levied annually for twenty years, to constitute a forestry investment fund for purchase, protection, and improvement of state forest lands. This draft of a bill further authorized the state forester, under supervision of the Forestry Board, to enter into land purchase contracts with payments to be made as money from the continuing appropriation became available. Actually, the committee filed two separate reports because of differences on water powers, but there was full support of the forestry program.



Griffith and head ranger Weaver at Minocqua. Note A railroad station in the background, and the water tank for steam locomotives.

the years of achievement (1911-1915)

Prospects appeared most favorable for progress in previously proposed forestry programs on December 31, 1910, the date of the letter of transmittal of Griffith's third biennial report. The work of examining the scattered lands had been completed, while acquisition in the forest reserve had resulted in reasonably well-blocked state ownership. Thus, his goal, the actual management of a forest, lay before him. With the endorsement of the forestry amendment by the people, strong support by the Committee on Water Powers, Forestry and Drainage, and recommendations for a two-tenths mill tax for forestry both by that committee and the Conservation Commission, he could look forward to the coming legislative session with high hopes. In this third report his plans are outlined: the forestry headquarters with required buildings and a forest nursery are to be established at Trout Lake, in the heart of the state holdings of 143,000 acres in iron, Oneida and Vilas counties. In the European tradition of numerous small nurseries, and in those days of horse and wagon transportation, he also planned nurseries at Lake Tomahawk and Rest Lake. In his first report, it was stated that reforestation must be postponed until land ownership could be consolidated, fire lines cleared and rangers regularly employed because of the fire hazard. This was repeated in 1910, in answer to criticism of procrastination in failing to begin forest planting by those who did not understand its purpose.

So his plans also included a staff of rangers who would build roads, clear fire lines, erect fire lookout towers, and build the telephone lines connecting the towers to the ranger stations and the headquarters:

Each ranger will be obliged to keep one or two saddle horses, as in that way they can cover their districts much more rapidly and save their strength and energy for the various kinds of hard work they will be called upon to do. . . . These rangers will be appointed after civil service examinations so practical in character that there will be no trouble in selecting men well equipped for the work and who can be taught the rudiments of forestry that it is essential that each ranger should know. . . . They must be good woodsmen and good axemen, with a natural liking for the woods and the life of a pioneer.

All of this sounded most intriguing to me early in 1911, then a senior forestry student at Michigan Agricultural College (now Michigan State University). Having learned of the pending examination and written to Griffith, I received a copy of that report and a letter expressing the hope that I would take the examination since I was a resident of Wisconsin. The examination was held at Rhinelander in March 1911, and it was indeed practical. We were required to identify numbered specimens of twigs, bark, and planed lumber. While being interviewed by Assistant

State Forester Moody and Secretary Hazleton of the Civil Service Board, I was required to give the reading of the needle of a surveyor's compass sighted on a church spire: elementary, but most confusing to one not used to the transposition of East and West on a surveyor's compass. In the afternoon, we were taken out to a nearby logging job and required to estimate the board foot volume of a stand of pine and the number of cords of pulpwood in a plot of black spruce, to pace a measured distance along the iced sleigh-haul road, and in pairs to chop through a felled pine tree.

We had been informed that the first twelve on the list of eligibles would get appointments as rangers, while some of the others would be given seasonal work as patrolmen, all at \$60 per month. During May, most of the men were on the job, though a few of the first twelve did not accept appointment. In my case, it was necessary to complete college work and I was not hired until June 1911. That spring, however, I helped to lift and pack planting stock from the college nursery. The shipping tags read: State Board of Forestry, Arbor Vitae Mills, Woodruff, Wisconsin. At Woodruff, the shipment was picked up by the Yawkey-

WISCONSIN LEADS IN FORESTRY

ONLY THREE STATES HAVE
A LARGER RESERVE.

Pointing the Way for Con-
servation of Nation's
Resources.

PRINCELY 300,000 ACRES
ACQUIRED BY THE STATE

CONFERENCE THIS WEEK IS
CALLED BY THE PRESIDENT.

VITAL TO NATION'S FUTURE

Wisconsin Now Trying to Correct the
Mistakes of the Past by En-
lightened and Practical
Methods.

(BY STAFF CORRESPONDENT.)

MADISON, Wis., May 9.—The Wisconsin delegation to the conference of state governors and forestry experts, which will be held in Washington this week at the invitation of President Roosevelt, should be able to take a leading part in the important and unprecedented discussion concerning the conservation of the state's forest resources. Although young

NO TAXATION WHILE TIMBER IS STANDING

PLAN TO ENCOURAGE OWNERS
TO SPARE THE TREE.

HOW IT WORKS IN GERMANY

LAND IS TAXED ON WHAT IT
OUGHT TO PRODUCE.

JACK PINE NOW VALUABLE

Formerly Despised Timber Comes to
Be Recognized in Wisconsin
at Its True Worth.

Tax Land for Estimated Yield.

"Germany leads the world in all forestry work, and the Germans have solved this problem nicely. We in Wisconsin will come to it, in time. They tax land on its producing capacity, estimating at the soil should yield, and basing tax on that. A man who is a good, careful manager will benefit from the tax. The poor manager will be taxed for. The poor manager will work out excellently. It is self-acting

a first step in this direction, we in the last session of the legislature of land owned by one individual, of course, that it is a benefit to have a man start a young forest. It is an entering wedge, meant for the farmers, since it is impossible to begin to realize that they should have wood lots. Lots are among the most important sessions on the farm. We insist that it pays to hold them conservatively, and not destroy them.

STATE LEADS CONSERVING RESOURCES

A LITTLE LATE BUT WORK
IS PROGRESSING.

Must Save the Forests
to Save Vast Wealth in
Water Power.

PROJECT IN HANDS
OF A STATE BOARD

EXPLAINED BY STATE FORESTER
ER E. M. GRIFFITH.

UNDO WORK OF LUMBERJACK

State Now Has 300,000 Acres in
Forest Reserve—Aims to Con-
trol Lake Region Along
Michigan Border.

MADISON, Wis., July 18.—"Forestry is not forestry where it does not pay. It is a business proposition, and more than almost

Milwaukee Free Press, May 10, 1908

Milwaukee Free Press, Feb. 2, 1908

Milwaukee Free Press, Feb. 2, 1908



Forestry headquarters, Trout Lake. The near extension was the office for Assistant State Forester Moody, and included the switchboard for the 4 lines to the lookout towers.

Bissell Lumber Company, taken on their spur line to Arbor Vitae, and then up to Trout Lake without charge. Unfortunately, this first planting stock was shipped from Lansing by freight, so that it was ten days on the road and some of the stock had heated and mildewed. The plantation of Norway spruce to the north of the present camp site on the east shore of the upper half of Trout Lake represents part of that shipment.

Meanwhile the Legislature was acting on the forestry appropriation. Apparently, the bill for a tax of two-tenths of a mill for twenty years, as given in the report of the Committee on Water Powers, Forestry and Drainage and estimated to yield \$600,000 annually, did not stand much of a chance. However, the Senate voted \$200,000 annually for ten years for land purchase, but this was reduced in the Assembly to \$50,000 annually for five years. Thus the opportunity to buy large blocks of land at low cost from lumber companies as they were completing their cut was reduced, though the authorization to enter into land contracts made it possible to commit up to \$250,000 with reasonable promptness. The procedure was to place the deeds for contracted lands in escrow with a bank for release when the contracted annual payments had been made.

Though the high hopes for funds were only partially realized as to land acquisition, the same Legislature did appropriate \$35,000 annually for forestry administration and operations, a substantial

increase from the \$9,800 of the preceding six years. This was augmented by the \$5,000 annual allotment for fire prevention and control under the federal Weeks Law, Wisconsin being one of sixteen states to qualify for such grants after it was enacted in 1911. Griffith's program of developing the forest reserve was now financed to a reasonable extent: at least he was able to raise our pay from \$60 to \$75 per month. Some work at Trout Lake, though not mentioned in his report transmitted in December of 1910, had actually been done that summer and fall. A small frame building, later called the cook shanty, had been built. Logging slash had been piled and burned to clear the building and nursery sites. Similar clearing of a strip along the edge of the

standing old-growth pine was also done. In September, pine cones had been gathered from the tops of trees being felled in adjacent logging operations. Lacking proper facilities, the cones were dried in the sun and a fair supply of white and red pine seed extracted.

My later arrival at Trout Lake found the work in full swing. Most of us slept in tents and we ate in the cook shanty. While his cookee was setting the food on the table, Haywire Dave, the cook, would pace back and forth near the door, eyeing us like a lion tamer, then abruptly stepping aside to say iTake it.!

The versatile Joseph Lucius, former trespass agent, builder of the noted Brule River canoes and of summer homes on that stream, had brought with him a crew of workmen skilled in construction of log buildings. He had drafted the building plans in consultation with Griffith. The main building was a combination of a German Forstamt, to provide living quarters and an office for the assistant state forester, and a men's dormitory. A large kitchen served both dining rooms, and the building was ready for occupancy in October before it was too cold for comfort sleeping in tents.

The boathouse was also the pumphouse to supply the building, and later, to water the nursery seedbeds. A motor boat served to get mail and local supplies when the logging trains were not running, for there was horsedrawn stage service from Woodruff to the summer resorts across the lake. Occasionally, the motor boat towed a scow to take the team of horses and a wagon across at the narrows, to get to the west side of the lake. The barn was needed, for the state owned a team of horses and a pony for use by Moody, while an ice house served to keep meat and other food.

Supplies arrived on Fridays, the traditional day, when the lumber companies ran a supply car to the several logging camps.

Meanwhile the nursery had been stumped and mostly plowed, so that the first seedbeds had been sown, though all of the seeding was not completed before the Fourth of July that first year. Evenings, after supper, three of us would often water seedbeds, two on the handle of the pump near the barn, the third getting a rest handling the nozzle on the length of garden hose.

During a spell of hot, dry weather, Moody sent me out on fire patrol. Lending me his plat book, he deposited me on the west shore of Trout Lake to start out on a suggested route. Staying that night at Paquette's Resort on Boulder Lake, now the YMCA Camp Manitowish, I hiked via Boulder Junction, around Big Crooked Lake to Boulder Dam, then westward cross country following stretches of old logging roads when they went my way and came out at the narrows between Spider and Manitowish Lakes, where the Highway 51 bridge is now located. A call brought a boat from what was then Buck's Resort. After a night in the guide shack, one of the guides rowed me to the north end of Spider Lake the next morning, and walking around Clear Lake I contacted Ranger Krueger. His crew was building a road around the north end of Rest Lake to connect with the old road to Manitowish.

A smoke was beginning to show in the west, so I walked down the Chicago and Northwestern track to the Powell siding and westward, and slept that night in a tent of a settler who had built his cabin where Bear Creek joins the Manitowish to form the North Fork of the Flambeau. After a breakfast at the small sawmill operation called Emerson, I found two small fires near Springstead Lake, which were extinguished with volunteer help. I stayed at a summer resort where the owner was so pleased to see a ranger that he would not accept payment for meals and lodging.

The next morning a helpful guide rowed me across the lake and put me on a foot trail heading west. Being well off the area covered by my plat book, I had but to head for the big fire. By noon the smoke carried by the west wind was blotting out the sun, but there was a strong breeze on my back sucked in by the conflagration. Snowshoe rabbits and two deer were coming off a ridge into the open swamp. A man yelled to come arunning. Joining him before the backfire met the main fire, I soon heard a tremendous roar as the two fires met. At the camp of the Atwood Lumber Company of Park Falls, the camp buildings had been saved and a small crew was hauling barrels of water on stoneboats to wet down the log decks on

the landing. One team of horses was magnificent as they quivered but stayed under control when buckets of water were thrown on them while passing the hottest part of the fire. Meanwhile, Ellis M. Weaver, the ranger who had a crew building roads and firelines in the Bearskin country, had arrived, and I learned I was in the Town of Eisenstein in Price County. After the logs were safe, we were fed and given clean blankets. That night there was a heavy rain and we were free to return.

So on the morning of the Fourth of July, we headed back cross country to Pine Lake, followed the road to Lac du Flambeau, got some sleep on the floor of the depot because the Ashland Limited was late, had breakfast at Woodruff, and learned that Weaver's roan mare, Midge, had again won the pony race. The bandstand, composed of planks supported by half-barrel beer kegs, testified to the festivities of the preceding day. Walking to Arbor Vitae in time to catch the logging train, I returned to Trout Lake.

Later, stationed at Boulder Dam with two lumberjacks, we converted abandoned railroad grades to roads or fire lanes by pulling the decaying ties and then plowing. Phil McDonald, one of the initial 12 hired by Griffith, came up and taught me to use dynamite on one stretch requiring removal of stumps. Most of the land examination for the active acquisition program then underway was done by the two cruisers, Jacobs and Johnson, and Ranger J. J. McDonald.

All of the other rangers had crews opening roads and fire lanes. A. E. Doolittle cleared, stumped and plowed diagonally across two sections, from the old Woodruff Boulder Dam Road to the southeast corner of Trout Lake, there to connect with a road Phil McDonald had worked through the uncut pine so that a team could be driven from Headquarters to Woodruff. Frank Long built roads near Sayner and using mostly railroad grades and an old trestle across the lower end of Plum Lake, provided a road from Sayner to the southeast corner of Trout Lake. Charles and Clayton Vaughan, with a crew of twelve men and two hired teams, built the Nebish Road and the one along the south side of Sand Lake. Johnny Dougherty, after opening a road from the west side of the Trout Lake Narrows, moved his camp to Upper Gresham and extended his road up to the Manitowish River. All of these crews also built fire lanes, preferably between two lakes or two streams, though some old sleigh-haul or railroad grades branching off from roads were also worked. The latter provided access so that a team and plow could be used on fire control. Each ranger was also provided with township diagrams on which to show the location of his projects and to correct gross

errors made in the original government survey. Meanders defining lake shores were often fictitious.

Before the freezeup, holes for telephone poles had been dug and the Vaughan brothers had been cutting poles in a cedar swamp near Partridge Lake. Foundations had been poured for the buildings at four ranger station sites. Many of the rangers were passable carpenters and worked on the buildings during the winter. A few patrolmen were kept on to string telephone wire. After some survey jobs, my assignment was to draft a map of the forest reserve, using the data compiled by the rangers. The four lookout tower sites on Muskellunge Hill, Boulder Dam Ridge and those near Rest Lake Dam and Lake Tomahawk had been located, for one of the main purposes of this map was to serve in locating fires by intersecting bearings from two towers. The single-line ground-circuit telephone system connected the ranger stations and lookout towers that were erected in the summer of 1912 to the switchboard at headquarters. The modified windmill towers had a platform and railing, and a canvas roof was added later. The map table was protected by a metal cover, but it was still necessary to climb down from the tower to the telephone instrument in order to report a fire.

Road and fireline construction continued, and for the first time, reasonably adequate presuppression work had been done when J. Girvin Peters of the U.S. Forest Service made his first Weeks Law inspection trip in the summer of 1912. Accompanied by Weaver, they covered the area on Weaver's two saddle horses, for Weaver had been advanced to head ranger the year before. At the time of the examination, we had been advised that this promotion would go to one of the three who ranked highest, and although Weaver was third on the list, Griffith had properly advanced the one best qualified.

The following extract from a publication of those days imparts an understanding of road conditions then prevailing in this area:

King's Official Route Guide
Automobile Routes of the Central States
Copyright 1911 - Price \$2.00
Minocqua to Rhinelander, 32.2 miles.
Road poor, sand and dirt

- .0 Leave depot, pass Hotel Minocqua on left (Accommodations poor and no garage)
- .1 Turn left, curve left, then curve right
- .4 Cross long bridge and go up sandy hill
- 1.0 Pass lake on left
- 1.1 Pass lake on right
- 1.2 Curve right and go up long sand hill, following main road

- 1.8 Turn left here for Tomahawk Lake and go to forks
- 2.4 Take left fork
- 4.9 At forks, keep left fork
- 5.1 Turn right, pass old school house on right
- 5.2 Turn left (lumber yards on right) Turn right around lumber yards
- 5.3 Hazelhurst
- 5.4 Go under lumber viaduct (Look out for top of car-dangerous)
- 5.5 Do not cross R.R.
- 5.6 Turn left (boarding house on right), go straight ahead
- 5.7 Cross R.R., follow winding road, curving around
- 6.4 Lake on left
- 6.6 Curve around lake on right
- 6.7 Cross ascending bridge and parallel with R.R. track on left, go up hill
- 6.9 Cross R.R.
- 7.2 Curve around hill
- 8.2 At forks, pass road on right and go straight ahead
- 8.7 View of lake on left
- 10.7 Turn left for Tomahawk Lake
- 11.0 Turn off right for Means Resort
- 11.3 Parallel with R.R.
- 11.4 Cross R.R. and turn left, still parallel with R.R.
- 12.0 Lake on left
- 15.0 Lake on right (Autos slow down here as you pass old ruins of saw mill, go along lake on right)
- 16.1 At sign post, turn right and go up long hill
- 18.8 Cross R.R. and pass Post Office of
- 18.9 McNaughton, follow telephone line
- 19.3 Pass school house on right and go straight ahead
- 19.7 River on left, curve left
- 19.8 Cross iron bridge over river and then with similar directions, southward on the east side of the Wisconsin River, until
- 32.2 Hotel Fuller
Morgan Garage & Supply Co., one block from hotel
On this route, there is lacking one of the frequent items, "Pass saloon on right."

The sawmill referred to at 15.2 miles was that of Dougal McNaughton, who in earlier days had the Northwestern Railroad set out on a spur track for the private railroad car that he used in supervising his lumber operations both here and in the lower peninsula of Michigan. After 1920, for several decades, this site on McNaughton Lake has been occupied by the

forestry camp where young men from the state reformatory have done constructive forestry work on state lands.

By the fall of 1912, it was possible to drive with team and wagon from the Trout Lake Headquarters to each of the ranger stations. In his biennial report, Griffith was able to report completion of the ranger stations at Little Carr Lake near Lake Tomahawk, Rest Lake Dam, Boulder Dam, and Plum Lake. These included the ranger's dwelling, a combined woodshed and ice house, a barn, and a small bunkhouse where crews were housed in the summer. By the following winter, the ranger station at Star Lake was completed and a cabin had been built on Carroll Lake east of the Woodruff fish hatchery.

A total of 159 miles of road had been built during the first two seasons at an average cost of \$118 per mile. Citing the savings resulting from the use of old logging railroad grades, Griffith contrasted costs of work by the same ranger: \$35.64 using old grades, and \$267.08 per mile building across an area of brush and stumps. As a road from Star Lake to Sayner was badly needed and as it will be very generally used by the public (now Vilas County Trunk N), more time and money was spent on it than would usually be the case. This road work was all done with forestry funds; they were not town roads and there was no thought of securing easements in crossing lands not owned by the state. It was not until February 6, 1914 that a source other than forestry funds appeared available for building roads, for at that time Griffith reported to his board that Ralph E. Smith, President of the State Board of Control, was prepared to assign inmates from the state prison for such work. The plan was endorsed but was not activated, it being deemed advisable to await the decision on the legality of the state forestry program then before the State Supreme Court.

The firelines built during the first two years totaled 118 miles at an average cost of \$87.70 per mile, and the 56 miles of telephone line averaged \$36.77. The latter figure included the stumpage value of cedar poles cut on state land. The four towers represented an average cost of \$131.43. Presuppression work included cutting of dead stubs within six rods of 83 miles of road at an average cost of \$5.34 per mile. These were mostly white birch, which, though left in logging, died after the pine was cut. As to this work Griffith thought it necessary to explain how pieces of burning birch bark could be carried long distances by the wind. Hazard reduction also included burning of pine slash on 135 acres. With favorable seasons weatherwise, only some 30 fires occurred on the forest reserve in two years, and these were promptly detected

and suppressed. Since he was no longer state fire warden, Griffith in his 1911-12 report included no figures on forest fires elsewhere, but his inspector examined 651 coal-burning locomotives. Of these, 472 were found to be in good-to-fair condition as to ash pan and front end netting, some were being repaired, and twelve were ordered out of service until properly repaired.

FOREST PLANTING AND NURSERY PRODUCTION were not slighted during this initial period of construction of facilities for administration of the reserve and for control of forest fires. The first plantations were made in the spring of 1911 on tracts earlier denuded by logging and fires, with planting stock purchased from Michigan Agricultural College. Of that effort, now most evident is the stand of Norway spruce between County Trunk M and the upper half of Trout Lake. In the spring of 1912, some 18 acres near the nursery had been planted with purchased Scotch pine seedlings. By the fall of 1912 the nursery inventory showed 933,000 one-year seedlings and 1,299,000 of two-year stock, part of which had been transplanted. The Yale transplant board was used for that operation. Production costs for two-year seedlings ranged from \$0.47 cents per thousand for white and red pine to \$1.07 for Norway spruce, but did not include a charge for capital investment in developing the nursery. The minutes of the State Board of Forestry on July, 1912 stated: It is the intention of the State Board of Forestry to sell trees, at slightly above cost, to citizens of Wisconsin who may wish to reforest their non-agricultural lands within the state.

Ground had been cleared for a nursery at the Tomahawk Lake ranger station. Citing the success of a camp for tubercular patients in Pennsylvania, Griffith stated that his board stood ready to set aside land for a sanitarium for convalescents and that work in a nursery was suitable for such patients, though at first they might work only a few hours a day. At its meeting of October 10, 1913, the State Board of Forestry set aside lots 1 and 2, Sec. 8, T38N VE, for use by the State Board of Control, and a convalescent camp was subsequently built on this point between Big and Little Tomahawk lakes, but abandonment of the nursery near there precluded the realization of this plan to provide light work for the convalescent patients.

Planting plans for the spring of 1913 included a demonstration plantation on the point extending westward into Star Lake, near the community of that name with a site largely surrounded by water, and with the nearby ranger station, this offered a minimum

hazard from forest fires. In the years of the Star Lake sawmill, a fence had been built across the base of this peninsula so that company work horses could be turned out to pasture on Sundays, thus eliminating the need to clean out the stable during summer weekends. Though Star Lake had become a ghost town with the closure of the sawmill, the fence was still there when the plantation was established. The planting area was mostly in bluegrass so that patches of sod were scalped and the trees planted in grubhoe holes. Scotch pine was planted towards the east to make a quick showing, for those ridiculing the planting program were ready to point to any examples of failure. The native white and red pine constituted most of this plantation, though some ponderosa pine were also set out. A permanent accurate record of this plantation will be kept and it should prove a very valuable guide to all future tree planters of northern Wisconsin, was Griffith's concluding statement.

More interesting, as a study in silviculture, was the 1913 plantation along a former logging railroad grade from Trout Lake to Sayner. For some distance eastward from Little John Lake, Scotch and red pine were planted in alternate rows for a width of 5 chains on each side. With the early limited supply of red pine seed, and the ready availability of Scotch pine seed from German dealers, the latter species predominated in the first output of two-year seedlings. Thus Griffith's purpose was to use the Scotch pine as "fillers", to be removed in periodic thinnings, eventually leaving a pure stand of native species. As a rule, the plantations of stock from the Trout Lake nursery were successful, for the deer herd was at a low level; in fact, the possibility of deer damage never entered our minds. We did know of a winter deer yard in a swamp near Dollar Lake.

Land acquisition proceeded as rapidly as the appropriation would permit. With forest growing stock so badly depleted due to past cutting; timber sales, which are the normal source of forest income, were not yet possible. So Griffith sought rental income by leasing lake lots for summer cottages, and such lots were platted on Trout Lake and several others. Very few lots were ever leased and these proved to have mostly a nuisance value, so that this program must be set down as an unsound venture. His 1910 plan to reestablish section lines and corners, the

latter to have concrete or iron pipe monuments with brass caps, never got underway. However, a set of government survey field notes, typed and leather bound, was prepared at Madison for each township in the reserve. These were available to the rangers and helped to verify many almost obliterated corners.

Evidence was perpetuated by blazing nearby trees and some cedar posts, and new bearing trees were set and added as notations to the field notes. Meander corners, where section lines intersected lake shores, survived logging and fires better than section corners. Frequently it was possible to cut notches above and below old blazes and remove a slab of overgrown wood to reveal the scribe marks on original bearing trees. The removed slabs often revealed the numbers and letters inscribed on the bearing trees raised and inverted like printer's type.



Trout Lake nursery, about 1913, showing beds covered with lath to protect new seedlings from animals and direct sunshine.

THE GRANT OF ISLANDS previously sought was now realized. In his 1911-12 report Griffith stated: "Due to the untiring efforts of Congressman E. A. Morse in the House of Representatives and Senator LaFollette in the Senate, the U.S. Congress on August 22, 1912 granted to Wisconsin all the unsurveyed and unallotted islands in inland lakes north of Township 33. The islands are granted to Wisconsin as an addition to the state forest reserve and the act provides that they must always be managed as part of the reserve or they will revert to the United States." Again,

as with the 20,000-acre grant and the Weyerhaeuser grant on the Brule River, Griffith was nailing down his gains with a reversion clause. He had stressed this point at the hearing on the bill before the House Committee on Public Lands on January 12, 1912, as well as the need to retain the islands in public ownership because of their aesthetic value. It was brought out that these islands had been withheld from any conveyance by Secretaries Garfield and Ballinger, while a letter from Acting Secretary Samuel Adams of the Interior Department indicated that it would cost the federal government much more to survey these islands than could be recovered by their sale. Because they were not surveyed, the government could not issue patents on them, so they were conveyed under the broad provisions of a grant. The record of this hearing includes letters of endorsement addressed to Congressman Morse from Governor Davidson, Secretary of State Frear, State Treasurer Dahl, President Van Hise and Dean Russell of the University, and from several members of the Legislature. One of the briefest of these is quoted because it evaluates Griffith the man, rather than his current cause!

Wisconsin Legislature
Oshkosh, Wisconsin
January 25, 1910

Hon. E. A. Morse
House of Representatives, Washington, D.C.
Dear Sir:

Enclosed you will find a copy of a letter I have just received from Mr. Griffith, our State Forester. As you know, Mr. Griffith is absolutely reliable, public spirited, looking out for the best interests of the state and knows what he is talking about. Anything that you may be able to do to further his plans, I am sure, will be very acceptable to the people of the State at large. Presently, I know nothing in particular about the merits of the bill he advocates, aside from what he says in his letter, but I do know that Mr. Griffith understands the situation and knows the needs of the State and would not advocate any measure that was not meritorious and just to the State.

Yours truly,
Wm. M. Bray

Promptly after New Year's Day of 1913, we began to locate the granted islands, equipped with plat books and cross-section paper on which to map the islands and all the shoreline, or, in the case of large lakes, such part of it as required to show position of the islands. There were two blank forms: one to give information on the lake, the other to describe each island as to length, width, shoreline and timber. In my

case, a copy of the government survey plat of the islands in Crab Lake was provided. Our instructions were to examine all meandered lakes for islands; for unsurveyed lakes, the purchaser of the land descriptions owned whatever land was above water. Naturally, this work was done in the winter when the lakes were frozen and we could pace distances on the ice, for mapping was based on magnetic compass and pacing. We had our own snowshoes; some bought them locally while others ordered theirs from Dunham at Norway, Maine, Griffith having provided us with leaflets from that manufacturer. Mine were the model Dunham had designed for use by Robert E. Perry on his expedition to the North Pole, and on Griffith's advice extra coarse mesh was specified. This permitted loose snow to sift through when stepping forward. Snowshoes, unlike skis, permitted pacing of distance. The Finns near Hurley were using their long, narrow skis for travel in the open and Finnish ski boots with their turned up toes were still being made in Ironwood, Michigan, but cruisers and trappers used snowshoes.

My assignment was Ranges 7, 8, and 9 East, a strip 18 miles wide, from near Summit Lake and Tomahawk, northward to the Michigan line; my partner was first Frank Long and later Henry Freund. To the east, J. J. McDonald with Phil McDonald had Ranges 10, 11, 12 and 13 East, a wider strip but with less distance to the Michigan line. To my west, A. E. Doolittle with Robert Stamp had Ranges 4, 5 and 6 East, but omitting the Lac du Flambeau Reservation. State cruiser H. A. Johnson covered a much wider strip with fewer lakes to the west, while the extreme northwestern part of the state and Florence County were assigned to Joseph Lucius, who, with completion of the buildings at Trout Lake, served as locomotive inspector during the fire season.

We might leave some point on a railroad and after several days arrive at a town on another line. Free meals and lodging were always available at logging camps, where we were welcome to sleep in the foreman's cabin rather than in the bunkhouse. Caretakers at remote summer resorts were also willing to have someone stay overnight, but more than once we came after sundown to a place where we had expected to stay to find no smoke rising from the chimney. One morning Henry Freund and I left Eagle River while it was still dark, with a large sandwich in an inside pocket where it would not freeze, to head north and west. After checking several lakes we headed northward across a large swamp where an early wet snow had frozen on the low shrubby leatherleaf and Labrador tea, so that we broke through at every step. Because Henry Freund had thought it interesting to try out some bearpaw snowshoes (bearpaw snowshoes

were practical only for the instrument man working around his transit on winter surveys), neither of us could walk in the tracks of the other, and so we proceeded side by side punching holes in the crusted snow across that long swamp.

At noon, we saw a shacker fishing through the ice who had several walleye pike. He invited us to eat with him and while his cabin was far from clean, we decided that the boiled potatoes and fried fish were sanitary. Though not actually a case of cabin fever, he was eager to talk, but we broke away after learning of two trappers who had a cabin at the west end of Buckatabon Lake. So we continued on, mapping the islands in Buckatabon and reached the trappers' cabin. But there were only two narrow bunks, a so-called laundry stove which served for both heating and cooking, and a table hinged to the wall which could be let down only after the door was closed. After pointing out that there was no room for two more, they assured us that they had a very well-traveled snowshoe trail to Star Lake. It was indeed good going and bright moonlight, so that we arrived at the newly built ranger station at Star Lake nearly fourteen hours after leaving Eagle River. The others, of course, had similar experiences, though the details are not so well fixed in my memory. Toward spring, some lakes were covered with slush or even water over the ice, but we knew enough to keep away from inlets and outlets and the assignment was completed before the ice became unsafe.

THE FOREST RANGER COURSE previously proposed was outlined in the 1911-12 Report of the State Forester. Although Griffith continued his course of lectures at the University, for he held that an understanding of forestry was an essential part of a liberal education, he never advocated a professional course here, considering the forestry schools in Michigan, Minnesota and Iowa as providing adequate opportunity for such instruction in the lake states. His immediate need was for rangers to conduct the actual field work for the intensive forest management he was initiating. Like the forests of Europe in which he had worked, the forest reserve was to be organized on the basis of blocks and compartments. Only an accelerated planting program and intensive forest management could bring to early full productivity this forest property and so justify the investment in its purchase; otherwise, the soil was lying idle, the sun shone, and the rain fell to no purpose.

The first group of students registered in the College of Agriculture early in January of 1913. The course of instruction included Dendrology, Silviculture, Soils, Land Surveying and Mapping, History of Forestry, Forest Measurements, Meteorology, Fish and Game, Camp Management, and Mechanical Drawing. The forestry subjects were taught by Assistant State Forester Moody, and the others by members of the College faculty. After the middle of April, the students moved to Trout Lake for a month of work with pay at \$40 and board. This coincided with the season of nursery work and planting, so they gained experience in lifting and planting stock, transplanting and preparing new seed beds. It was this first group of ranger students that set out the trees of the Star Lake plantation of two-year seedlings in the spring of 1913, under the supervision of W. D. Barnard. Thereafter field instruction, with subsistence but no pay, was resumed for six weeks. At a tent camp on Little Tomahawk Lake, it was my assignment to give instruction in surveying and the use of the transit. Shifting to a camp on Muskellunge Lake, the students had received training in compass and pacing to locate section corners. It was there that Dean H. L. Russell came to observe their field training, and to see the work underway, for he was a member of the Forestry Board. A competent botanist, he could identify more ground cover plant species than I could. President Van Hise, chairman of the Forestry Board, and Governor Francis E. McGovern made frequent trips to evaluate the forestry work during those years.

Moody then took the ranger students to a tent camp in virgin forest north of Boulder Junction near the Michigan line, where they could gain experience in cruising and timber estimating. Then in August most of them were assigned to work with some ranger as laborers, again at \$40 per month and board. They returned to Madison in January 1914 for the second year of instruction, which covered Timber Utilization, Tree Diseases, Forest Entomology and Economics, Protection, Law and Administration as they applied to the forest. At the same time the second group of students had registered, after which they heard an address by Dean Russell. One of that second group, F. G. Kilp, was far from encouraged. He and his friend Hugh Percy discussed whether they should go home to Fond du Lac or continue, but fortunately they did continue. It is strange that Dean Russell, who had studied in Germany and must have been aware of the place of forests in a country where population pressure called for maximum production of food crops, could not accept the allocation of considerable areas of cut-over land for forestry in Wisconsin.

OTHER INTERESTS were not neglected while major effort was devoted to developing the forest reserve.

State aid for schools and local government was needed to offset the removal of so much land from the local tax rolls by state purchase within the reserve, as noted in Griffith's 1911-12 report. One function of towns, road construction and maintenance, had received adequate contribution in his opinion by an expenditure of \$18,821 of forestry funds to build 159 miles of road during the biennium. But there were other costs. School districts in the area had such a wide range of enrollment that state aid based on the percentage of state lands in each was not the answer, and so he concluded "the correct solution will demand the best efforts of the legislature."

The Oneida County Board had acted on this matter, and on December 5, 1912, Henry Wubker, Sr., B. N. Moran, and W. E. Knapp were named to appear on behalf of the county. A bill was introduced setting a tax rate of 1 1/4 percent for all functions of local government, the assessment to be made by the State Tax Commission, which then certified a total valuation of \$1,249,521. But the constitutionality of such an appropriation was raised and no appropriation was ever made.

FARM WOODLOTS received consideration because the forestry problem extended far beyond the boundaries of the forest reserve; there was no action on county forests or by the wood-using industries. So Griffith engaged a member of the University of Michigan forestry faculty to study farm woodlot conditions during the summer of 1912. Three counties were chosen: Sauk, with much hilly land and predominantly oak stands; Lincoln, at the frontier of farm development; and Manitowoc, a well-developed agricultural county with northern hardwoods and remnants of white pine stands. Summary reports were given in the Report of the State Forester for that biennium.

An experimental farm woodlot, in connection with the Rusk County Agricultural Experiment Station near Conrath, was proposed to Van Hise on December 10, 1913, and he authorized Griffith to enter negotiations with Ben F. Faast for an exchange of lands, for by that time Van Hise and Griffith constituted the executive committee of the Forestry Board. While Chapter 670 of the Laws of 1913 had forbidden further land purchase until July 1, 1915, the attorney general had held that this did not limit land exchanges on the basis of equal value. So the Forestry Board authorized the exchange and in March of 1914 approved the agreement for the management of the experimental

woodlot, as drafted by Griffith and Dean Russell. A recent check of the Land Commission records, however, revealed that this exchange was never consummated.

THE RECREATION VALUES of the forest reserve had won some appreciation, but Griffith was the first to envision their full potential. Based on forms filled out by one of the cruisers who called at some summer resorts while on regular duty, plus those secured by correspondence, there were in the area 91 summer resorts in 1912. They included 639 buildings with a capacity of 4,379 guests. That season the operators had an income of \$365,025 and cared for 13,131 guests.

Average rates were reported as:

	<u>Per Day</u>	<u>Per Week</u>
Room and board	\$2.00	\$12.00
Guides	2.50	6
Boats	0.50	3.00

Adding estimates of railroad fares, livery stables, guides and boat rentals, Griffith reported the total income of the area from recreation at \$674,444. "The forest reserve region should become in time a great summer resort for people throughout the entire Mississippi valley . . . The summer resort business within the forest reserve is still in its infancy but should grow very rapidly now that the state is building up a permanent forest reserve, which will be protected from forest fires that were rapidly ruining that beautiful region." As an indication of the potential he states: "The summer resort business in northern New York state, which is largely within their forest reserves, amounts to approximately \$10 million a year, this amount being paid by the tourists, as they are called, in railroad fares to hotels, boarding houses, etc. New Hampshire does about as well, and the summer resort business gives the old State of Maine nearly \$20 million a year."

A GAME PRESERVE of 8,000 to 10,000 acres was proposed. Deer could be driven into the enclosure, the federal government would provide elk from Jackson Hole, Wyo., and some game enthusiasts had offered to secure several moose. The production from these animals was to be released periodically. Beaver, mink, and otter were also to be stocked. There were then no beaver sign in that area and an old man at Boulder Junction was pointed out as having been a beaver trapper. So Griffith called attention to the need: "The state expends annually a large amount in the propagation of fish, but so far the state has never done anything toward the propagation of game. The

sportsmen of the state object to any of the funds derived from the sale of hunting and fishing licenses being turned into the general fund of the state, as they contend that all funds so derived should be used in the propagation and protection of fish and game. It is therefore suggested to the legislature that an appropriation of \$20,000, which is asked for the game preserve, should be paid out of the hunting and fishing license fund. He also proposed that the large open marshes in the reserve be designated as refuges for migratory waterfowl.

A game preserve of some 600 acres extending northward from Allequash Creek was fenced in 1914. Judge Backus, who had a summer home on Big St. Germain Lake, helped to secure the woven wire at reduced rates from a company in which he was an officer. Before the final gap was closed there was a deer drive, and State Game Warden Sholts with several deputy wardens participated. According to a story circulating at that time, Ranger J. J. McDonald cut a birch pole at the proper angle, split the end and inserted a wedge so that he could make very credible deer tracks in the snow. This device was said to have contributed to the success of the drive and made Warden Sholts very happy. In any event, there were enough deer to increase so that after a few years overbrowsing became evident.

The first carload of elk reached Woodruff and these were hauled up on wagons, but only two survived. Another shipment of 22 the next year fared better after receiving shots by a veterinarian from Merrill. Baled hay was provided for the elk during winters.

STATE PARKS became a major activity in the summer of 1913. The Legislature assigned the protection, care and development of the parks to the State Board of Forestry, with appropriation as follows: Peninsula Park \$18,000, Devil's Lake \$10,000, Wyalusing \$8,000 and Interstate \$2,000. Two of the rangers were assigned to parks: A. E. Doolittle to Peninsula, and P. A. McDonald to Devils Lake. Paul Lawrence was sent to Wyalusing Park the following year. Some of my time was taken by surveying and mapping the parks, and on road construction in Interstate Park. On one occasion Griffith secured the services of Colin Kidd, golf professional at the Maple Bluff Country Club. Travelling by train to Sturgeon Bay, the two of us then rode the stage to Ephraim and laid out the first golf course in a state park.

Park land purchase was the function of the Park Board, with W. H. McFedridge of Baraboo and Victor I. Minahan of Green Bay as the members. Following Minahan's resignation, Griffith was appointed on January 2, 1915 to succeed him by Governor

McGovern, who had previously appointed him to the Conservation Commission and as the state delegate to the National Drainage Congress.

THE RECORD OF ACHIEVEMENT to the end of 1914 is summarized in the Report of the Special Legislative Committee on Forestry. At its January 29, 1915 meeting, the State Board of Forestry decided that since the above committee report would be in print within a few days, the Biennial Report of the State Forester should not be printed until the Supreme Court decision as to the legality of forestry was handed down. Because of subsequent events it never was officially printed.

Summary of the Financial History of the State Board of Forestry 1903-1914

Appropriations for Administrative Purposes:

<u>Biennium</u>	<u>Annually</u>
1903 - 04	\$4,045
1904 - 05	5,500
1905 - 06	9,800
1906 - 07	9,800
1907 - 08	9,800
1908 - 09	9,800
1909 - 10	9,800
1910 - 11	9,800
1911 - 12	35,000
1912 - 13	35,000
1913 - 14	<u>35,000</u>
Total	\$173,345

Grants of Land to the Forest Reserve:

*Nebagamon Lumber Company	6	
4,321.07 acres at \$10.00 @		\$43,210
Federal Government	6	
19,950.57 acres at \$ 5.00 @		99,752
Federal Government	6 637 islands	<u>204,566</u>
Total value of donations		\$347,528

Purchase of Forest Reserve Land:

From \$2.00 or less to \$2.56	60,217.62	acres
2.68	3.50	56,972.54
3.75	4.60	38,451.95
5.00	6.50	3,270.67
6.50 and over	<u>90.77</u>	
Total acreage purchased	159,003.55	
Total Acquisition,		
Purchased and Donated	183,275.9	acres

*Weyerhaeuser; this sum is twice the total appropriation for administration.

Cost of Improvements

	<u>Total</u>	<u>Average</u>
Trout Lake Headquarters	\$ 8,829	\$
Six ranger stations	20,418	3,403.00
Carrol Lake cabin	894	6
Four purchased cabins	550	6
Four lookout towers	547.60	136.90
76 miles of telephone line	2731	35.93 per mile
284 miles of dirt road	32,734	131.58 per mile
141 miles of fire lines	<u>11,939</u>	84.67 per mile
Total improvements	\$78,652.60	

Fire hazard reduction included more than 1,500 acres of slash disposal and the cutting of stubs within six rods along 125 miles of road and fire line. Forest plantations totaled some 1,000 acres, and this had been financed out of the Reforestation Fund derived from sale of scattered forestry grant lands. The forest nursery at Lake Tomahawk had been started in the spring of 1914, at which time the Trout Lake nursery had reached an annual production of a million trees.

Production costs per thousand:

1-year seedlings	\$0.73
2-year seedlings	0.90
2 - 2 transplants	1.72

During 1914, sale of planting stock to individuals totaled 24,000 seedlings at \$3.50 per thousand. Part of this was purchased by Assemblyman Ray J. Nye of Superior, whose father was interested in forest planting. This, with additional planting, constitutes what was later known as the Nye-Hayes plantation west of Wascott in Douglas County.

During eleven years, under Griffith's leadership, Wisconsin had reached third place among the states in its forestry program, being outranked only by New York and Pennsylvania where efforts began much earlier. Because of his competence and fair dealing, Griffith was highly regarded by his staff, and we in turn carried out our assignments. Thus the Legislative Committee on Forestry in 1914 was able to report: "The state forester is to be congratulated on the field force under him. We found them all to be very thorough and much interested in their work."

the growing opposition (1912-1915)

WITH SETTLEMENT IN A FORESTED REGION, it became the American tradition to *subdue the land*. The clearing in which the settler built his log cabin was enlarged to grow food. Timber was too plentiful to have value. There were cases where choice hardwood logs were piled and burned to dispose of them, and the only income was from potash leached from the ashes.

Later, fuel wood was sold in the developing communities. With growth of the lumber industry, cut-over lands became available. But as farms were developed on the fertile hardwood soils of Clark, Shawano and Marathon counties, stumps remained a problem and brush had to be burned. A woman telling of her girlhood during that period recounted how her father, before going to the nearest settlement on a Saturday, promised that if the children would do a good job of burning brush, he would give them something special on his return. That evening he gave each of them a dried prune, and they felt well repaid. Subsistence farming provided the necessities until more land was cleared.

But for the pine lands of the north, with generally lighter soils and a shorter growing season, it was another story. The census of 1900 reported Wisconsin the leading state in lumber production, with 3.4 billion board feet. But by 1915 the annual lumber cut had dropped to 1.4 billion. The trend to move to western white pine of the northwest inland empire or to the southern pine of the Gulf states began. Sawmill machinery, logging locomotives, other equipment, and key personnel were moved to the new locations. Occasionally, a name like Wausau Southern Lumber Company reflected earlier origins.

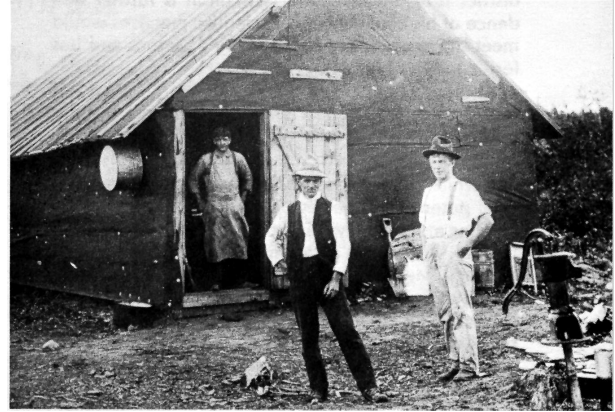
Both these and other pine operations which had not yet cut out, left vast areas of cut-over lands, which without question were destined to become fertile farms. But Griffith, who had seen intensive land use in Europe with pressure from increasing populations to produce food crops, also knew of the European tradition to keep one-fourth of the land in forest. However, he knew from the beginning with what he had to contend. In his first report he pointed out: "It is one of the tenets of forestry that no land which is valuable for agriculture should permanently be held for forestry." On the other hand, referring to the large areas of good soil where hardwoods predominated, he deplored the sale of poor sandy land for agriculture where settlers would surely fail. As to the purchase of land within the forest reserve, Griffith's report stated,



View of north country near Star Lake in Vilas County following logging, 1900- 1910.

Such a policy will not interfere in the least with the best development of northern Wisconsin, though it may interfere with the profits, and arouse the opposition of land speculators.

Seeking to meet opposition with reason, Griffith called for soil surveys. In the summer of 1910 the College of Agriculture, at the request of the State Board of Forestry, conducted a soil survey of four survey townships and parts of four others in Vilas and Oneida counties, which were considered typical of the forest reserve. The findings were: 72 percent rough or stony, 22 percent moderately high agricultural value; 4 percent jack pine sand plains; and 2 percent swamp. This was supplemented in the summer of 1912 by a reconnaissance of another eight survey townships conducted by Prof. F. L. Musback of the College of Agriculture, with Ranger J. J. McDonald to help on horizontal control. This report showed less than 25 percent as possible agricultural land. So again Griffith pointed out that the Forestry Board would be doing a great wrong to encourage any man to locate on an isolated tract of rather doubtful agricultural land in the heart of the forest preserve, for though the man might be willing, it would doom his wife and children to a hard, lonely existence without the benefits of good schools or a growing community, adding that with so much of the highest grade soil awaiting development, the state should direct settlement into proper channels. There was also the matter of the shortest growing season in the state: less than 90 days between killing frosts. In the summer of 1913, I saw a small field of waist-high corn in Vilas, County killed by a freeze in mid-August. (The Chippewas, who relied largely on wild rice, had cornfields only on frost-proof low level islands or points of larger lakes.)



Settlers trying to eke out a living at farming the north country.

The soil survey reports were promptly denounced as defaming the fair name of Vilas and Oneida counties, and brought criticism to the Agricultural College. This was largely allayed in 1912 when Dean Harry L. Russell assigned E. L. Luther as the first county agricultural agent in the state, and, it was claimed, the first in the nation, to serve in Oneida County.

Although an ex officio member of the State Board of Forestry, Dean Russell was never a supporter of the state forest program. A sincere believer that there would never be more than enough land for agriculture, he was disturbed to see extensive areas assigned to produce timber. A good botanist, readily identifying ground cover species on a walk through the woods, his doctorate was in bacteriology. Although his European studies included a period at the famous Koch Institute, he came away without any impression of German forest management. His support of the unfortunate drainage district program of central Wisconsin is further evidence of his confidence that scientific practices would meet the problems of short growing seasons and less fertile soils.

Another opponent of the state forest program was Alex McRae, the supervisor of assessments for the counties where state forest lands were being purchased. His concern was depletion of the tax base, and while he may have had doubts about the agricultural potential of the region, state purchase was proceeding more rapidly than a probable wave of tax delinquency. And it was taking many miles of choice lake frontage. Meanwhile, the Rhinelander News, joined in 1913 by The New North, was carrying advertisements to sell land, and letters testifying to excellent farm crops, simultaneously with editorials against forestry. One slogan: Get your farm land now; there is only one crop of land.

The forestry question was covered in the metropolitan press occasionally, as in this case, copy in the *Milwaukee Evening Wisconsin*, May 24, 1912 (Reprinted from the *Rhineland News*).

î To plant a crop which will take 100 years or more to mature, to turn this region back to a forest, TO MAKE IT HOME FOR WILD ANIMALS AND A PLAYGROUND for the idle rich of the great cities. We who live in this country cannot afford to have the state, at this time, stop the growth of our cities and villages and farming industries and tax the people now here to carry on a scheme for their destruction.î

A. W. Brown, Brown Bros. Lbr. Co.

While this kind of sentiment was being expressed, the record nevertheless shows 6,684.89 acres in Oneida County were purchased for forestry from Brown Bros. Lumber Company, A. W. Brown, President, November 1, 1907.

Excerpts from the proceedings of the Oneida County Board of Supervisors during these times also express the character of local opposition.

îMarch 19, 1912. Resolution by Henry Wubker, Sr.: That the state reimburse Oneida County, and the Towns of Hazelhurst, Newbold, and Sugar Camp for loss of taxes on 62,468.03 acres purchased by the state, and also the settlers cut off from schools, churches and markets. Adopted.î

îDecember 5, 1912. Resolution by Scott. That Henry Wubker, Sr., B. N. Moran and E. W. Knapp appear at Madison to obtain legislation to correct the evils arising from the present system of reforestation and particularly to (1) sell state lands, (2) aid towns with state lands on roads, and (3) pay toward support of schools in such towns.î

Opposition by the State Legislature to the forestry program was recorded early in the 1913 session.

îJt. Res. 66A. Resolved by the Assembly, the Senate concurring, that the geological and natural history survey be directed to make a preliminary soil survey of the lands included within the proposed boundary of the forest reserve in Forest, Iron, Oneida, Price and Vilas counties, such survey to be completed not later than January 1, 1915.î

This resolution brought Oneida County Board actions on March 26, 1913: A resolution commending the above committee for the good work they have done in Madison, toward putting an end to Mr. Griffith's pet scheme to gobble up our best agricultural lands. Unanimous rising vote.

Meanwhile, Assemblyman Whiteside, whose district included Vilas County, had introduced Bill A-487: Sec. 1 provided for a Special Legislative Committee on Forestry, with three members from the Senate and five from the Assembly, to review and report on forest land purchase to the 1915 Legislature.

Sec. 2 decreed that no further purchase of lands was to be made for the state forest reserve until said committee had so investigated and reported, nor until the first day of July, 1915.

Scheduled for hearing before the Joint Finance Committee on April 11, 1913, many opponents from the north with exhibits of farm crops appeared and were heard. Following normal procedure, Bill A-487, after it was passed by the Senate and signed by the governor, was enacted as Chapter 670, Laws of 1913. It was hailed as a triumph by the opponents in the center of the opposition, Madison. The minutes of the regular fall meeting of the Oneida County Board contain:

îSeptember 13, 1913. Resolved: That the following gentlemen: Hon. Justice Barnes, Hon. W. T. Stevens, Hon. W. J. Whiteside, Hon. Douglas Anderson Mr. E. L. Luther, Mr. F. A. Lowell, Hon. H. F. Steele, Mr. Barney Moran, Mr. Henry Wubker, Mr. E. W. Knapp and Mr. George H. Dawes are extended thanks and expressions of appreciation by this, the Oneida County Board of Supervisors, for the diligence and earnestness shown by them in their efforts to oppose the present policy of the Wisconsin State Board of Forestry in its endeavor to take from the county and other northern counties, thousands of acres of good agricultural land for forestry purposes. Adopted.î

Of those listed, two rate further consideration. As to Justice Barnes, was it really commendation to direct attention to this former county resident who had attained high office as a member of the State Supreme Court who as earlier noted had twice sold land for addition to the forest reserve, and had now disregarded the impropriety of intrusion on the legislative branch by one of the judiciary to appear in a partisan role on a matter most probably destined to become before the court? He did not disqualify himself when the case was heard. Mr. Barney Moran, who then represented

FORESTER TALKS HERE

Large Crowd Listens to Address by
Head of Forestry Department
Tuesday Night

INTO ANCIENT HISTORY

Many Assertions Made by Griffith are
Known to be Impractical by
Local Settlers

Chief Forester Griffith spoke for two hours Tuesday night at the City Hall before a representative audience of ladies and men and he was given the closest attention and every court though it was apparent from the fact that he had not the sympathy or support of the large majority present. Griffith told of Forestry in foreign lands and of the initial steps taken, through his personal help, in this nation, and then told what the state proposed to do in Wisconsin and in Oneida County. He said Oneida was selected as a Forest reserve and would be blocked out for reforestation. He showed how a large part of the county had already been bought up by the state and showed the immense tracts which were still to be bought and held from settlement. He talked of this section as a great summer resort and suitable for forests but had nothing to say of the tremendous values in agriculture.

Even Griffith has had to admit that the state must do something to help the taxpayers and he stated that a bill would be introduced at this session of the legislature for the payment by the state of a percentage of costs of schools and highways in each town where the state had bought and held large tracts. He believed the taxpayers should be relieved of this burden.

Rhineland News, Jan. 31, 1913

Oneida County in the Assembly and stoutly opposed the forestry program, will reappear as a factor in later forest developments.

In effect, the practice of forestry as a form of land use was tabled until January of 1915 and the next session of the Legislature.

THE SPECIAL LEGISLATIVE COMMITTEE ON FORESTRY, authorized by Chap. 670, Laws of 1913, conducted a thorough study on land use. First dividing into three groups, and with the aid of three timber cruisers chosen from the northwestern area of the state, they examined the state forest reserve in the

GRIFFITH WAS SLUGGED

Legislative Committee Last
Week at Madison Had the
Opportunity to Learn How
Untruthful Were the State-
ments Being Put Out by
Reforestation Board Re-
garding Agricultural Lands
in Proposed Reserve Belt.

The outcome of the investigation last Thursday by the legislative committee regarding the people of Vilas, Oneida, Forest, Iron and Price counties versus the state forestry board, resulted in a complete rout of the forestry people.

With a force of a hundred agriculturalists, backed up by facts and exhibits of both soil, grain and root crop samples, the truth

their policy upon Wisconsin.

BARNES RIDDLES ARGUMENT.
"This is a great big business proposition," continued Justice Barnes and the state's interest is not that of a few dollars. Execution of plans of this magnitude, means involving Wisconsin in the expenditure of tens of millions of dollars. You as legislators stand between the tax payers and those who seek to expend this money. There are a lot of representations on this question and men differ in their opinions but your duty is to ascertain who is right and who is wrong."

"Any proposition which plans to take one-twenty-fourth of Wisconsin and to convert it into a non agricultural section, it would seem is important enough, aside from the cost, to be considered and deliberated."

HUSTING URGES LARGE RESERVE

SENATOR-ELECT BEFORE
COMMITTEE

Believes Upper Lake Region Wisely
Chosen—Present Policy Will
Conserve Timber and
Beauty Spots.

United States Senator-elect Paul O. Husting, who was a visitor in Milwaukee Friday afternoon, gave his views on the state forestry problem to the legislative forestry committee, which has been holding hearings at the Hotel Wisconsin. "I feel very strongly as to the utility of this reserve," Senator Husting said. "If I had my way, the state would have a reserve of from a half million to three-quarters of a million acres of land. I think the state chose the best place for its reserve in the Upper Lake region, the most beautiful for the forestry."

Milwaukee Journal, Nov. 14, 1914

fall. Then, during the following growing season, they visited farms in the problem area. Seeking a basis of comparison, five members of the committee visited state forests of Pennsylvania, New York and Connecticut. Reports and photographs testified that forest plantations would thrive and indeed had produced merchantable timber.

As to the much-disputed effect of forest cover a stream flow, the committee cited the fact that acquisition of national forests in the past could not proceed until the U.S. Geological Survey had certified that the presence of forests on lands to be acquired would stabilize stream flow. The committee also found that

STATE FORESTRY LAND PURCHASES HELD INVALID BY SUPREME COURT

CONSTITUTION NOT PROPERLY
AMENDED, IS DECISION
WRITTEN BY JUSTICE
MARSHALL AGAINST
THE STATE.

"DIVERSION OF TRUST
FUNDS IS UNLAWFUL";
ACCOUNTING PROPOSED

E. M. Griffith, State Forester, Says
Department Work Will Continue as
Now as Administration Is Not
Touched on by Ruling—More Leg-
islation Is Needed to Allow Pur-
chase of Property Primarily for
Reforestation.

MADISON, Wis., Feb. 12.—The supreme
court has decided the forestry case,
which has been in court for some time
against the state. Justice Marshall wrote
the opinion.

In substance the court holds that sec-
tion 10 of article 8 of the constitution
was not legally amended; that the land
contracts for the purchase of forestry re-
serve lands are void and not authorized
by the present forestry law.

FORESTRY LAW UNCONSTITUTIONAL SAYS HIGH COURT

*May Upset Other
Important Laws*

JUDGE SAMUEL HASTINGS NAMED
REFEREE TO MAKE
ACCOUNTING.

POSSIBILITIES.

The opinion expressed in some
quarters as a sequence of the su-
preme court decision in the for-
estry matter is quite as startling,
if taken to be well-founded, as the
pronouncement of the court on
that particular subject.

Lawyers are inclined to the be-
lief that perhaps the state-aid
highway system and the bases on
which rest respectively the state
income tax and judges' and jus-
tices' salaries, would be voidable
in proceedings of appropriate na-
ture in the supreme court.

In a decision by the supreme court
yesterday that tribunal determined
what is known as the "forestry case"
which has been in litigation for more
than a year and which in its bear-
ings touched many vital points of
constitutional uncertainty. The de-
cision is far-reaching and may go to
the upsetting of many cherished no-
tions that come under the head of the
"Wisconsin idea."

In substance the opinion holds that
section 10 of article 8 of the constitu-
tion was not legally amended; that
the land contracts for the purchase of
forestry reserve lands are void and
not authorized by the statute. The
present forestry statutes are uncon-
stitutional and void; that the diversion
of the trust funds is unlawful and a
referee, Samuel D. Hastings of Green-
Bay, is appointed to referee the ac-
count between the state and its trust
funds and a lien on the lands belong-
ing to the trust funds and unlawfully
sold is declared.

May Reach Farther.

That the decision reaches to the
conversion of moneys returned to the
state, some \$1,200,000, during the ad-
ministration of Governor La Follette,
by the federal government and belong-
ing to the trust funds—in large pro-
portion at least—but turned into the
general fund and used for the ordi-
nary running expenses of the govern-
ment, is quite evident.

Call for Settlement.

of the court provides
dealings

Milwaukee Free Press, Feb. 13, 1915

Madison Democrat,
Feb. 13, 1915

the forestry work in Wisconsin, though more recent,
compared favorably with that of the three older states.
Returning, additional hearings were held in the
counties concerned and in Milwaukee to obtain
additional public participation.

Noting the extensive areas in northern Wisconsin
available for agriculture, and that much of the opposi-
tion came from demand for lake frontage, the commit-
tee concluded that selection of lands in the reserve was
well made, and no better place could be found in the
state.

The letter of transmittal of the report to the
Legislature was January 4, 1915. The State Board of
Forestry minutes for January 29 noted:

In view of the fact that the report of the
Legislative Forestry Committee will be in
print and ready for distribution in a few days,
and that it covers the work of the forestry
department for the last two years, it was
decided that the 1913-1915 biennial Report
of the State Forester should not be printed at
this time.

QUESTIONS POINTS IN DECISION

CHIEF JUSTICE WINSLOW CON-
CURS IN JUDGMENT IN FOR-
ESTRY CASE BUT DIFFERS
WITH LINE OF REASONING

CURBS POWERS

JURIST SAYS LITTLE MORE
THAN SHELL OF REFORESTA-
TION AND AFFORESTATION
POLICY REMAINS AFTER DE-
CISION

Madison State Journal, Feb. 26, 1915

A number of points in the recent supreme court decision written by Justice Marshall declaring unconstitutional the forestry plan, are questioned by Chief Justice Winslow of the court in a concurring opinion handed down today.

"I had hoped," says the chief justice, "that the opinion of the court would be so phrased that I should be able to let the case pass without further wringing, but, as it stands, I feel compelled in justice to myself to state certain respects in which I differ radically from the lines of reasoning in the opinion, while not disagreeing with the judgment itself."

The chief justice agrees without discussion to the propositions that the constitutional amendment was not passed because not agreed to by the second session,

GRIFFITH DRIVEN OUT OF OFFICE BY POLITICS

STATE FORESTER SAYS WORK OF
DEPARTMENT IS
RETARDED.

ASSERTS 360,000 ACRES
OF TREES ARE CONSERVED

Tells Natural History Society, Here,
of Deal in Which Wisconsin
Was Swindled Out of
Timber Land.

Milwaukee Free Press, Feb. 26, 1915

"Too much politics, causing the progress of the work to be retarded, is the reason I gave notice of my resignation as state forester," said E. T. Griffith, Madison, who spoke before members of the Wisconsin Natural History society last night in the public museum.

"State Was Swindled."

"Our state is rich in forests," said Mr. Griffith. "It is one of the greatest in the country. But continual interference on the part of state officials and constant changes in the administration hinder the work."

"Wisconsin now has 360,000 acres of

fine forest lands. I trust that the state will not be foolish and give away these reserves to land speculators as she has on two previous occasions.

"In 1882 the state sold 248,000 acres of fine forest lands to land sharks. Thirteen men secured the whole acreage. One man bought 16,000 acres. In addition his firm purchased 9,000 acres.

Brings \$8.17 an Acre.

"In 1878 speculators scoured from the state several hundred thousand acres. Land sharks put up the plea that tracts were needed for settlers. In eighteen years, there were but twenty-one persons living in 500 square miles. The land brought only \$8.17 an acre, although it was covered with valuable timber.

"There is a great future in store with the land that has again been reserved if the state manages instead of mismanages as it has in the past."

STATE FORESTATION.

It would be unfortunate for the state if it were at this time deprived of the services of an expert, instructed forester. Mr. Griffith possessed two prime requisites for his office, intelligence and enthusiasm. Should we now have the misfortune to get a politician, or a well meaning man without special qualifications, in charge of this department, forestation in Wisconsin will receive a set-back from which it will be years in recovering.

Just such wholesale graft as the retiring state forester instances, when in 1882 the state sold 248,000 acres of fine forest to land sharks, thirteen men purchasing the entire acreage, occurred in the past through ignorance or collusion, and the same sort of thing is waiting to happen now. An administration that belittles the importance of the forestry service, encourages the dishonest in the hope to search out possible pickings from a pur-blind state.

Milwaukee Free Press, Feb. 28, 1915

Thus, what would have been the final report of the Griffith era was not submitted.

SUPREME COURT CASE. At the same time as opposition was being continued against Griffith and the forestry program, and the Special Legislative Committee was conducting its study, other actions were being taken that culminated in the supreme court case which ruled on the constitutionality of the whole forestry program.

The background for this scenario dates back to the state constitution, which, reflecting experience with bonds for canal construction by states from which delegates had come, held that the state shall not engage in works of internal improvement.

In the early years of the state forest program, the weird question arose: Does a state forestry program constitute a work of internal improvement which would be in violation of the state constitution? To play safe, a constitutional amendment declaring forestry did not violate the constitution was passed by both houses of the Legislature during successive sessions, submitted to the people, and validated by a popular vote of 62,406 to 45,874.* However, the Assembly in the second instance failed to use the full formal language, which left a haunting doubt: Maybe the home run doesn't count because the Assembly didn't touch second base.

*1910 Blue Book, page 338



July 29th, 1915

Mr. F. M. Griffith,
Madison, Wisconsin.

My dear Mr. Griffith:

Am addressing this letter to you at Ma
not knowing your eastern address.

Am sorry that I could not be there t
said good bye in person, still I hope that for
in Wisconsin will be such that you will be in
their progress and have occasion to return a
occasions. While the set back the Supreme
rather discouraging and in fact spoiled th
Legislature so far as I am concerned -- s
that Wisconsin is going to have a good S
At the very first opportunity I am goin
of my interest in the question and wil
to the furthering of the work.

I regret that in your le
so good and faithful a public serva
that you did not get disgusted and quit before.

With my very best wishes.

Yours sincerely,

Lawrence

GIFFORD PINCHOT
MILFORD PIKE CO PA

State Board of Forestry
JUN 21 1915

June 18, 1915

Mr. F. M. Griffith,
State Forester,
Madison, Wis.

Dear Griffith:

I have just had a letter from Howard Weiss
in which he tells me that you are likely to resign on
July 1. I am deeply sorry to hear it, and I hope it
may not be true. Your work in Wisconsin has been of
such a character that if you are forced out now your
departure will be a very serious injury to the State.
I learn with very deep regret of the hostile
legislation passed at the last session. If it is not
too late, is there any way I can help?

Sincerely yours,

GP

Nevertheless, Griffith continued to push his forestry program despite the possible error by the Assembly in passing the 1909 Constitutional Amendment. The Forestry Board continued to purchase more land within the forest reserve Griffith had established. Increased attention to forest fire detection and control within the forest reserve was spurred on under Griffith's leadership.

In 1913, the question of forestry as a work of internal improvement arose again. The minutes of the Forestry Board, March 11, 1913 (President Van Hise, Dean Russell, and Attorney General Owen, present) state:

As the question has arisen whether the purchase of forest reserve lands was a work of internal improvement, and so prohibited by the constitution, various plans were discussed of bringing the case before the Supreme Court, and the State Forester was directed to find out if the Governor would get some outside party to start the action.

And on April 7, 1913 (President Van Hise, Dean Birge, and Dean Russell, present):

The Chairman advised the Board that Governor Francis E. McGovern had notified him that the Board should take such action as deemed advisable to them in regard to the Attorney General commencing as soon as

possible an action to determine the constitutionality of the law providing for the purchase of forest reserve lands.

It was voted to request the Governor to have such an action started as soon as possible, and the State Forester was instructed to notify the Governor of the Board's action.

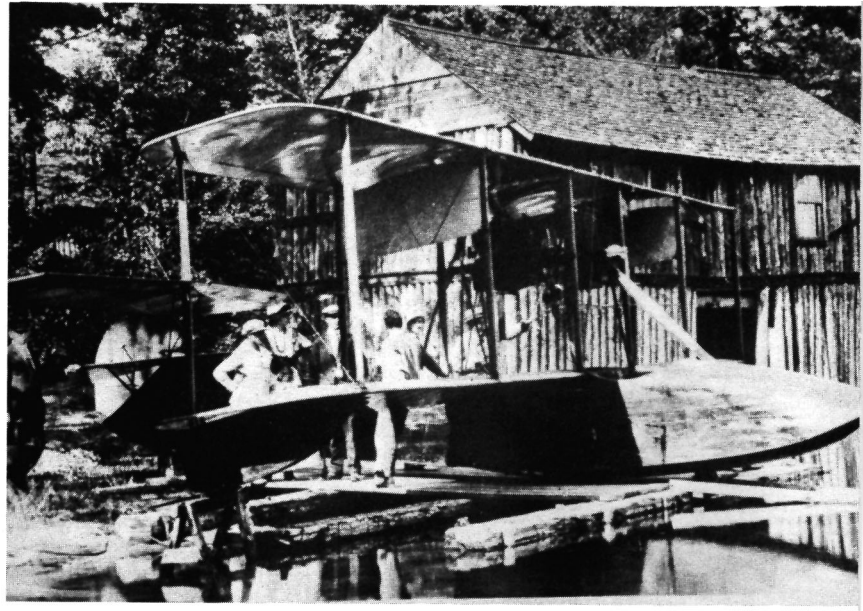
This led to a friendly suit (State *ex rel* Owen vs Donald) in which the State Supreme Court agreed to take original jurisdiction. Secretary of State Donald agreed to refuse approval of vouchers for payment on the G. F. Sanborn land contract, with Attorney General Owen bringing suit to compel payment. After submission of briefs by both sides, the Court called for an alternative writ setting forth every difficulty in order that all questions may be so solved as to protect the state and its officers in respect to the use of money for forestry purposes. .

The Supreme Court rendered its decision on February 12, 1915, and in essence ruled:

Forestry is fatally within Works of Internal Improvement prohibited in the state constitution, and the amendment to overcome this limitation is void due to errors committed by the legislature before it was approved by the people in November of 1910.

Laws assigning trust fund lands within the forest reserve to that purpose and applying the proceeds from the sale of other trust fund lands to purchase of forestry lands were void, being a breach of the trust and an invasion of the constitutional trusteeship of the Commissioners of Public Lands by the Legislature.

The land purchase contracts are illegal, constituting an indebtedness when the state debt to the trust funds already exceeded the constitutional limit of indebtedness. The sums previously paid on the land contracts are declared to be trust money. To protect the trust funds, the balance due on the contracts shall be paid.



Jack Vilas' plane - the first aircraft used to detect forest fires.

As to the first finding, Chief Justice Winslow, in his dissenting opinion, protested that forestry was not a work of internal improvement, but a proper activity of any civilized state. Of the several procedures held to be unconstitutional or in breach of trust restrictions, all had been taken pursuant to acts of the Legislature and with the approval of the successive attorneys general, who themselves were members of the Forestry Board. There was no reflection on Griffith.

With forest management on the verge of showing significant results, all action was halted.

THE CLOSING MONTHS. Meanwhile the Special Legislative Committee had submitted drafts of three bills to the Legislature in 1915, all of which embodied previous proposals of Griffith. One sought to expedite fire-fighting payrolls: providing payment by the state with a partial chargeback to the counties, the latter provision to assure local interest in forest fire control. The second sought to provide an equitable method of taxing privately owned lands committed to timber production by taxing the land as bare land annually, and the timber (potential income) only once when it is cut and the income is realized. (This bill blandly ignored the uniformity tax clause of the state constitution.) The third, and the only one enacted, created a Conservation Commission of three salaried members, with staggered six-year terms. The new commission combined the duties of the State Game Warden, the Fisheries Commission, the Forestry Board, and the State Parks Board, and was composed

of one qualified in fish propagation, a trained forester, and an engineer. As enacted, an experienced businessman was substituted for the engineer.

With forest management indicted, Griffith declined an appointment as the forestry member of the new commission offered by Governor Emanuel Philipp. However, he continued to serve the Forestry Board until its expiration at the end of the fiscal year. He attended a conference in Washington for the extension of the cooperative agreement under the Weeks Law. He also continued his duties as a member and secretary of the State Parks Board and he was naturally interested in a last appraisal of his projects on the forest reserve.

Forest fire prevention and control were unaffected by the court decision, being functions of the police power. Griffith, always aware of the possibilities of new developments, learned of a new activity at Trout Lake, and set about to explore its potential in respect to fire control. L. A. Jack Vilas, an aviation enthusiast, had shipped the components of his Curtis Flying Boat by freight to Woodruff, and then hauled them up to the southwest corner of Trout Lake by horsedrawn wagons for assembly. To him the numerous lakes offered limitless chance for takeoff and landing. While Griffith was intrigued by a new adventure, he also saw a practical use. And so it developed that in 1915 Griffith became the first professional forester to detect forest fires from an airplane. The original certificate, or diploma, is filed in the archives section of the Wisconsin State Historical Library at Madison.

WISCONSIN LEADS AGAIN

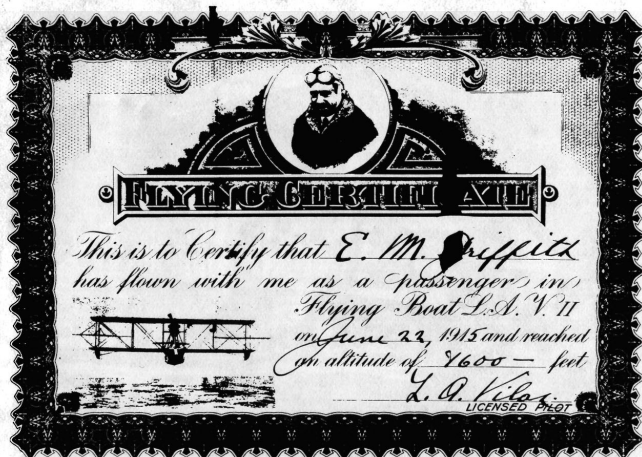
Noted Aviator, Jack Vilas, the First Man in the World to Use the Air Craft in Locating Forest Fires Is Appointed Forest Ranger

As a result of a recent flight undertaken by Jack Vilas, renowned American Aviator, with State Forester Griffith as a passenger, Wisconsin is the first state to adopt the hydro-aero plane as an aid in locating forest fires.

Tuesday, June 22nd, Messrs. Vilas and Griffith made an ascent and when at an altitude of 1600 feet a forest fire was located six miles from Trout Lake.

Forester Griffith was quick to appreciate the practical use to which such a machine could be put and enlisted Aviator Vilas in the service of the state forthwith so that Mr. Vilas is now a state forest ranger and undoubtedly the first aviator in the world to make use of his hydro-aeroplane for the protection of life and property from forest fires.

Mr. Vilas has been spending a vacation at the Manitowish summer resort and it should be a matter of satisfaction to the residents of this locality to note the prompt manner in which Forester Griffith availed himself of this new aid in the fight against forest fires, and the public spirited response of Mr. Vilas in accepting the commission.



MEMBERS OF BOARD
WILLIAM HENRIKSON, JR., CHAIRMAN
PRESIDENT UNIVERSITY OF WISCONSIN
RICHARD L. HARRIS
JAMES H. HARRIS, SECRETARY
AND ADAM HARRIS
AND THE STATE FORESTAL BOARD
MANITOWISH
JULY 28, 1915



EDWARD MERRIAM GRIFFITH,
STATE FORESTER
FRANK B. HODDY,
DEPUTY STATE FORESTER
STATE BOARD OF FORESTRY,
WISCONSIN.
MADISON, July 28, 1915.

Mr. F. C. Wilson,
Forestry Assistant,
Madison, Wis.

Dear Mr. Wilson:-

Under the provisions of Subsection 3, Section 1494-48 of the statutes, I herewith depute you to act as Acting State Forester, during my absence from the office.

Yours truly,

E. M. Griffith
State Forester

C-AC



Griffith's retirement home in Roxbury, Connecticut

Jack Vilas was promptly appointed by Griffith to fly aerial forest fire detection from his base at Trout Lake and provided with an official badge as pilot, with pay in the form of many thanks. The Milwaukee Journal had a black and white motion picture film of a staged demonstration showing a most conspicuous smoke provided by burning some tarred roofing paper at an abandoned logging camp, a report at Forestry Headquarters, and a crew of fire fighters dashing off in the Forestry Department's first half-ton Ford truck. (The film has been lost since 1925.)

Finally with only some routine papers executed, Griffith appointed me to complete details. After his interest, he felt no further obligation to Wisconsin. Because it was my state, he expressed assurance that people would support forestry, and that a future course had been charted with eventual opportunity for constructive work.

And so he left Madison on July 30, 1915, never to return.

THE LATER YEARS. The only record of subsequent forestry work Griffith performed was as consultant to the Taggart Paper Co. of Watertown, N. Y. He and Arthur S. Hopkins, for the state, made a joint appraisal of the holdings of that company which were being acquired by the state of New York within the Adirondacks Forest Preserve. Apparently he took the defeat of his program in Wisconsin so much to heart that he severed all connections with forestry, including membership in the Society of American Foresters.



Griffith on the beach with his infant son at his Ormond Beach, Florida winter home.

On March 14, 1916 he married Alice Dunne and retired to Merrifield, his country place near Roxbury, Connecticut. His winters were spent at Ormond Beach, Florida, where his favorite recreation until the end was a fast game of tennis with younger men. He died there of coronary thrombosis on March 9, 1939 at the age of 67. His wife survived until 1943. The only child, Robert W. Griffith, was born on January 4, 1921, attended the New Mexico School of Mines, served as captain in the Army Air Force in World War 11, and was a major in the reserves.

This son married Norma Simpson, of Ormond Beach, on October 23, 1946 and lived only until July 5, 1954. So of Griffith's family there now survive his daughter-in-law and two grandchildren - Robert Merriam Griffith, born January 31, 1950 and Alicia Dunne Griffith, born January 13, 1954.

forestry after the griffith era (1921-1933)

On his departure Griffith had the assurance that the state forest lands would remain as forest lands, even though they were, in effect, mortgaged to the trust funds. The state, ordered by the court, continued to acquire blocks of cut-over land, including miles of choice lake frontage, at \$2.50 per acre. The land purchases added to the state indebtedness already in excess of the constitutional limit.

A court-ordered audit disclosed an indebtedness going back to equipping troops for the Union Army (which recalls stories of the 8th Wisconsin that carried the war eagle WA& as regimental colors). The total indebtedness was set at \$1,517,514.23, whereupon the Legislature of 1915 provided a continuing annual appropriation of \$100,000. After seven such payments, an appropriation of \$1,813,700 was made to pay the remaining debt plus accrued interest. The final release by the Commissioners of Public Lands was dated April 18, 1923. No longer were Conservation Department employees required to seek their permission to cut fuel for the ranger stations. During the interim, there was no cutting of timber on state forest lands and the nursery at Trout Lake operated at a reduced scale, supported by sale of the planting stock it produced.

FORESTRY AMENDMENT. With the debt retired, the stage was set for the new Conservation Commission to take charge of an extensive property of high recreation value and known forest productivity. Improvements for its administration were in place, forest plantations and natural regeneration were responding to sun and rain, all in accord with the destiny Griffith had impressed on the area. Only the authority to engage in forestry and the funds therefor were lacking.

Already a joint resolution for adoption of a forestry amendment to the constitution had cleared the 1921 Legislature. Readopted verbatim, it carried in the general election referendum of 1924 by a vote of nearly two to one. It limited the appropriation for forestry in any one-year to two-tenths of one mill on the taxable property of the state, the identical rate Griffith had ventured to seek in 1909. Then, within two years, in a clarifying action, the Supreme Court found the forestry amendment to be fully valid.

TAX REFORM. In the first (1906) Report of the State Forester, Griffith was concerned with a major obstacle to forestry by private enterprise - taxation. Forest land, being capital, is properly taxed annually; but timber, which is income from the land, is to be taxed only when it is cut and the income is realized. This was followed in the 1907-08 report by a draft of such a law to provide for Wisconsin's departure from the existing tax laws.

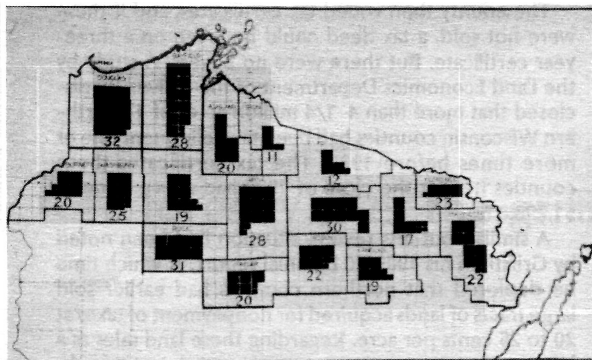
By 1925, with danger of forest fires approaching an insurable risk, the Griffith concern voiced earlier was again recognized - that for a viable state forestry program to be possible, the method of taxing forest land must be altered. Proposed was a plan to tax timber when cut and the land yearly.

The Legislature initiated action to amend the uniformity tax clause of the constitution that timber might be taxed separately or severed from the land. Advanced by the next Legislature, it was submitted for referendum vote and ratified by the public at the spring election of 1927. Whereupon the Legislature promptly enacted what became known as the Forest Crop Law, closely following Griffith's proposed draft of 20 years earlier, including the 10 percent severance tax on timber harvested. In anticipation of equitable taxation, the Nekoosa-Edwards Paper Company began its reforestation program in the spring of 1926, and within a year the Goodman Lumber Company sought the shelter of the new law, turning to selective cutting of its northern hardwoods and hemlock. But few lumber companies still had enough standing timber, enough forest capital, to convert to a sustained yield operation. For them it was liquidation of their enterprise; adding to the *icutover* problem.

CUT-OVER LANDS. Colonization companies bought large acreages of these cut-over lands, seeking settlers to buy and develop northern Wisconsin farms. It was at this time that the College of Agriculture moved vigorously to demonstrate how these lands could be cleared. Following World War 1, surplus reprocessed war explosives became tools in clearing the land of tree stumps. At one demonstration, with explosives in place, Dean Russel, I pressed a button, and shattered segments of stumps sailed skyward. Cooperating farmers, with teams of draft horses, pulled remaining stump roots. Plows and harrows followed, and the sun set on an acre seeded to oats.

But such dramatics did nothing to reduce the expanding area of cut-over lands, and colonization companies found only negligible demand for their holdings. As they no longer could pay taxes, this threatened the solvency of the counties. For under Wisconsin law, of property taxes received by the county treasurer the rather negligible state special charges are first paid in full, then the school districts receive their full levy, then the rural towns receive their full levy if collections are adequate. And finally, the county receives the remainder, if any.

The county then issued tax certificates, and if these were not sold, a tax deed could be taken on a three-year certificate. But there were no buyers. A study by the Land Economics Department of the University disclosed that more than 4 1/4 million acres of 17 northern Wisconsin counties had been tax delinquent one or more times before 1927. The tax certificates these counties held at the close of 1927 had a face value of \$1,798,810.



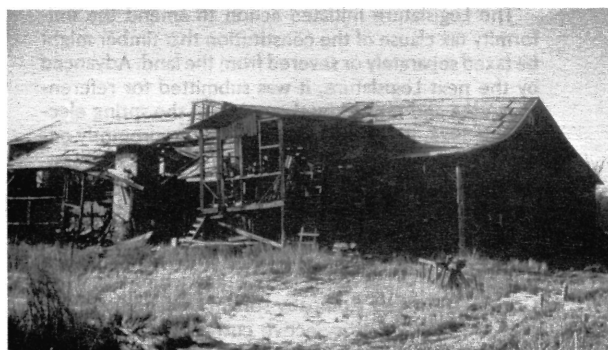
Percentage of total land in northern counties that was tax delinquent in 1927.

A similar, but less severe, situation had been noted by Griffith in his 1909-10 biennial report, at which time he deplored that northern counties had earlier sold large tracts of lands acquired for nonpayment of taxes at 20 to 25 cents per acre. Regarding these land sales as a lost opportunity to create county forests, he ventured a prediction.

“The price of agricultural land will advance as its value becomes better known, but the speculative holders of nonagricultural land will gradually let go of such holdings and the counties will then be able to acquire them. . . . Those counties will secure the greatest permanent prosperity that develop every acre to its truest and highest usefulness, and therefore it is recommended they be authorized by law to acquire forest reserves, and that the State Board of Forestry, upon request, may cooperate with any county in the acquisition, protection, and management of such reserves.”

After two decades, the problem had returned in overwhelming dimensions. The steps urged by Griffith to provide effective detection and suppression of forest fires and an equitable method of forest taxation had been taken, and proved sound. And the authorization in 1927 that counties could create county forests was implemented initially by Langlade County in 1929, with the entry of 10,160 acres of tax delinquent land they had acquired. This was the first step in the program to restore the tax delinquent lands to forest productivity.

With growing acceptance that forestry was the manifest destiny of much of the northern section of the state, permission had been granted to the U.S. Government to acquire land for forestry. Wisconsin, however, set a limit of 500,000 acres within boundaries approved by the Conservation Commission, the Commissioners of Public Lands, the governor, and the



Abandoned homestead during the period 1926-33 when so much of the land in the north was tax delinquent; 4,657 farms failed.

county boards of the counties concerned. This led to the establishment of two national forests in Wisconsin, the Nicolet and Chequamegon National Forests.

ENABLING LEGISLATION. An Interim Legislative Committee on Forestry and Public Lands was appointed. This committee listed 26 findings, two of which are of importance here: “The committee is impressed with the fact that the counties, because tax delinquent lands revert to them, are the chief governmental unit around which the program of public forestry in Wisconsin must be built, with cooperation and professional assistance from the Conservation Commission. As to the problems of towns and school districts, and the hardships of isolated settlers, another finding stated: “Both the orderly development of northern Wisconsin and the need for reducing expenditures because of tax delinquency, require that the counties be given the authority to control development, with a specific reference to setting aside forest and recreation zones.”

The committee’s efforts resulted in the passage of enabling legislation that (1) simplified procedures for counties to take tax deeds on lands to be entered under the Forest Crop Law, thus qualifying towns to receive a state payment in lieu of taxes; and (2) amending the county zoning law to include zoning for forestry, for the first time, as well as for agriculture and recreation.

Legislation passed in 1931 required the Conservation Commission to make an annual payment to the county from its forestry funds for county forest improvement. The first payment of \$16,754 was made in 1932. Although only 10 cents per acre per year, it initiated forestry practices.

The county forestry program continued to grow in partnership with the state. The counties own the land and conduct all operations and fiscal matters, the state contributes funds, both in lieu of taxes for local government and for development of the forest, and

provides technical service and planting stock from the state forest nurseries. The state recovers its investment in the form of severance taxes on timber sales, contracts for which are drafted by district foresters and validated in Madison.

UNCONTROLLED SETTLEMENT. In spite of the early successes in establishing county forests on tax delinquent lands, the tax base continued to shrink, and costs of local governments for roads and schools per family became excessive. But how can one express the costs of human isolation and deprivation, of hopeless effort to make a living? For the results of uncontrolled settlement against which Griffith had protested had become stark reality. Nor was his portrayal of inevitable misfortune overdrawn: a brief paragraph in the *New North of Rhinelander*, Oneida County, dated December 29, 1921, revealed:

Joseph Gauthier, 55 years of age, farmer near Monico, being despondent because of ill health and penniless, shot himself on Christmas morning. He left a wife and six children destitute.

Of course efforts were being made during those years to render help. The most isolated cases were not abandoned first, and trading of properties moved an elderly couple to a main highway. Moving a family to a farm with better fields included moving of buildings with county highway equipment, and cash incentives were paid because a school could be closed.

Still people moved in. A married couple lived as squatters in abandoned buildings in Marinette County. Both contracted typhoid: the man died and the wife moved away. In spite of warnings, another family moved in the next year. This time typhoid caused the death of the father, mother, and one child. Belatedly, the county health officer ordered the building to be burned and the well filled in. When an unemployed mechanic moved into Oneida County, he bought a tract accessible only by several miles of abandoned logging railroad grade. The wife had a teaching certificate, and in the fall she was employed to teach her own children at home. In midwinter, when a young trapper reported that his family was starving, a rescue party preceded by a highway snowplow to the end of the road, piled food on a toboggan and hauled it to the house on snowshoes.

This case led to control of unrestrained land settlement of which Griffith was a proponent.

THE ONEIDA COUNTY ZONING ORDINANCE. A county committee, seeking legal recourse, came to W. A. Rowlands, supervisor of county agricultural agents for northeastern Wisconsin, who had been working with me on land use in Marinette County, for guidance on settler relocation and on potential county forest boundaries. The most meaningful data compiled were two county maps showing operating and abandoned farms; and a record of tax delinquency for one, two, and three years, including lands already acquired by the county and tracts committed to sustained yield by industry.

The committee decided to invoke its zoning authority, which led to local opposition. Therefore, a Legislative Committee on Forests, Fires and Delinquent Taxes requested an opinion from the attorney general in September 1931 as to county board authority to remove settlers from a forestry or recreation zone and county board authority to abandon the maintenance of a road to a settler in an area zoned forestry - both parts of the Oneida County Zoning Ordinance. The attorney general's opinion reads:

The county zoning statute is undoubtedly in the public welfare. The cut-over area of northern Wisconsin speaks as eloquently against haphazard development as any city condition. The spotting of these lands with remote or abandoned farms, resulting in sparsely settled districts with insufficient population or value to support roads and schools, or to afford the comforts of living that this day should give to all, the misdirected efforts to farm lands not well suited to agriculture, with resulting personal grief and social loss; the far-reaching economic ill-effects of stripping the state of timber; the fire hazard of cut-over lands and the fire hazard of human habitations in their midst, all cry out for planning, for social direction of individual effort.

Since the basic need was to terminate further farm development and the associated establishment of legal residence, this could be met with a minimum of use districts: a Forestry and Recreation District, and the remainder as Unrestricted District, would suffice. Maps delineating use districts are an integral part of any zoning ordinance. Seeking adoption of a new and untried venture by a local unit of government clearly required educational meetings to win endorsement. At the many town meetings the people not only became familiar with terms like "established nonconforming use," but also with revising suggested boundaries of the limited use areas. A long process of meetings and

discussion led to endorsement by the town boards, and increased by 50 percent the area suggested for inclusion within the Forestry and Recreation District.

And so, after the town certifications had been filed in the courthouse at Rhinelander, the Oneida County Board, on May 16, 1933, adopted the first zoning ordinance in the nation establishing Forestry and Recreation Districts closed to new agricultural settlement. B. N. Moran, a committee chairman of the Oneida County Board who had contributed much to this conclusive action, was the same man who, much earlier, had been commended in a county board resolution for his efforts as their representative in the State Legislature in spiking Mr. Griffith's schemes!

With this, there was final and full recognition of forestry as an appropriate and desirable form of land use, which had been the objective of Wisconsin's first state forester. The zoning movement, begun in Oneida County, spread until 27 northern and central counties had closed more than 5 million acres to new farms. It

was legally established that some lands would find their highest use as forests.

Just before noon on November 16, 1933 in the courthouse at Eagle River, Vilas County had also adopted its zoning ordinance, and the chairman announced that unless some member had new business, a motion to adjourn was in order. Whereupon Ole Rimson rose to his full height, and in the soft voice often characteristic of huge men, spoke:

Mr. Chairman: One fact remains to be noted. We have just adopted a land use ordinance; we have our county forest, the first state forest has developed, and the plantation at Star Lake has become an attraction; we have industry forests owned by paper companies, and our recreation resources draw thousands, not only in summer. We have done everything Mr. Griffith advocated: He should have had our support.

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